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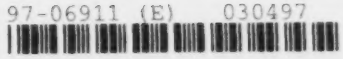

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INTRODUCTION

1. At its substantive session of 1995, the Economic and Social Council, upon the recommendation of the Commission on Sustainable Development, approved the establishment of an open-ended Ad-Hoc Intergovernmental Panel on Forests.

2. The Panel was mandated to pursue a consensus and formulate options for further actions in order to combat deforestation, and forest degradation and to promote the management, conservation and sustainable development of all types of forests. The Panel was requested to promote multidisciplinary action at the international level consistent with the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests[1] (Forest Principles), taking into account the Rio Declaration on Environment and Development[2] and Agenda 21.[3]

3. The Commission on Sustainable Development recognizes the sovereignty of countries over their natural resources, as defined in Principle 1 (a) of the Forest Principles. The Commission also recognizes that the right to development must be fulfilled so as to equitably meet the developmental and environmental needs of present and future generations.

4. In pursuing consensus and the formulation of coordinated proposals for action, the Panel was mandated to consider the following main interrelated categories of issues:

(a) Programme element I: Implementation of United Nations Conference on Environment and Development (UNCED) decisions related to forests at the national and international levels, including an examination of sectoral and cross-sectoral linkages;

(b) Programme element II: International cooperation in financial assistance and technology transfer;

(c) Programme element III: Scientific research, forest assessment, and development of criteria and indicators for sustainable forest management;

(d) Programme element IV: Trade and environment in relation to forest products and services;

(e) Programme element V: International organizations and multilateral institutions, and instruments, including appropriate legal mechanisms.

5. It was evident at the outset that the Panel would not be able to deal with all the complex issues before it in four sessions, lasting a total of seven working weeks. Consequently, a number of Governments undertook to convene special meetings and workshops on various aspects of forest management, conservation and sustainable development; a list of those activities is contained in annex II. The Panel wishes to record its appreciation of that assistance.

6. While the conclusions contained in the present report reflect the overall thrust of the discussion under various programme elements, only the proposals for action were agreed as a result of negotiations.

7. In submitting the present report, which contains a number of conclusions and proposals for action on the above-mentioned programme elements (sections I-V below), the Panel, recalling its mandate, wishes to:

(a) Reiterate the validity of the Forest Principles;

(b) Recognize that the Forest Principles and the forest-related and other relevant chapters of Agenda 21 have formed the foundation for its work;

(c) Recognize the progress that has been made since UNCED, including the results of several regional, international and country-led initiatives, which have contributed significantly to international dialogue on forests, national reports and better understanding of sustainable forest management;

(d) Emphasize that its proposals for action are meant to complement, supplement and elaborate upon the above-mentioned instruments with a view to facilitating their implementation;

(e) Stress that, to that end, its conclusions and proposals for action should not detract from the decisions and commitments made at UNCED;

(f) Recognize that there is a need as well as a potential for improving the effectiveness of existing national and international cooperation on forests by implementing its proposals for action;

(g) Stress the need, in implementing its proposals for action, to provide for effective partnership between and collaboration among all international parties and major groups, and in that context wishes to emphasize the crucial role of women.

I. IMPLEMENTATION OF FOREST-RELATED DECISIONS OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT AT THE NATIONAL AND INTERNATIONAL LEVELS, INCLUDING AN EXAMINATION OF SECTORAL AND CROSS-SECTORAL LINKAGES

A. Progress through national forest and land-use programmes

Conclusions

8. The Panel recognized the importance of comprehensive forest policy frameworks or "national forest programmes" for the achievement of sustainable forest management. It agreed that the term "national forest programme" is a generic term for a wide range of approaches to sustainable forest management within different countries, to be applied at national and subnational levels based on the basic principles outlined below. It emphasized that national forest programmes demand a broad intersectoral approach at all stages, including the formulation of policies, strategies and plans of action, as well as their

implementation, monitoring and evaluation. National forest programmes should be implemented in the context of each country's socio-economic, cultural, political and environmental situation, and should be integrated into wider programmes for sustainable land use, in accordance with chapters 10 to 15 of Agenda 21. The activities of other sectors, such as agriculture, energy and industrial development, should be taken into account.

9. The Panel emphasized a number of specific elements that need to be considered during the development and implementation of national forest programmes, in particular the need for appropriate participatory mechanisms to involve all interested parties; decentralization, where applicable, and empowerment of regional and local government structures; consistent with the constitutional and legal frameworks of each country, recognition and respect for customary and traditional rights of, inter alia, indigenous people, local communities, forest dwellers and forest owners; secure land tenure arrangements; and the establishment of effective coordination mechanisms and conflict-resolution schemes.

10. Regardless of the approach adopted by individual countries, national forest programmes, as long-term iterative processes, should recognize the following as key elements: national sovereignty and country leadership; consistency with national policies and international commitments; integration with the country's sustainable development strategies; partnership and participation; and holistic and intersectoral approaches. The Panel acknowledged the usefulness of testing and demonstrating the concept of national forest programmes on an operational scale.

11. The Panel recognized the need for national forest programmes to be based on a sound economic valuation of forest resources, including environmental services and non-timber products. It noted that national forest programmes can provide an effective link between strategic and operational planning. They should be specifically designed to increase effectiveness and efficiency at the country level with a view to attracting increased domestic and external resources.

12. The Panel also recognized the need for an external economic and commercial environment that is supportive of national forest programmes. Their implementation will be affected by market forces, including international trade. They need to be supported by a market context that enhances the economic values of forest resources and a price mechanism that promotes an adequate and remunerative return for the sustainable use of forest resources.

13. The Panel stressed that funding, in particular the provision of external resources, including private foreign investment and official development assistance (ODA), is greatly facilitated by a clear commitment on the part of recipient Governments to the implementation of national policies and programmes that promote sustainable forest management in the forest and related sectors. More efficient investment policies are needed for the successful implementation of national forest programmes.

14. Because of the intersectoral nature of national forest programmes, the Panel stressed the need for national authorities to look into the institutional capacity of forest-related sectors to ensure the successful implementation of

such programmes. It emphasized the importance of assessing and - where necessary - enhancing national capabilities at all levels to develop, implement, monitor and evaluate sustainable forest management.

15. The Panel acknowledged that coordination among all interested parties at the national and international levels is crucial for sustainable forest management. The Panel noted and welcomed further input from the Conference of the Parties to the Convention on Biological Diversity with respect to forest biological diversity.

16. Finally, the Panel noted the importance of improving regional and international cooperation for the exchange of information, technology and know-how by establishing appropriate networks to support national programmes for sustainable forest management.

Proposals for action

17. The Panel:

(a) Encouraged countries, in accordance with their national sovereignty, specific country conditions and national legislation, to develop, implement, monitor and evaluate national forest programmes, which include a wide range of approaches for sustainable forest management, taking into consideration the following: consistency with national, subnational or local policies and strategies, and - as appropriate - international agreements; partnership and participatory mechanisms to involve interested parties; recognition and respect for customary and traditional rights of, inter alia, indigenous people and local communities; secure land tenure arrangements; holistic, intersectoral and iterative approaches; ecosystem approaches that integrate the conservation of biological diversity and the sustainable use of biological resources; and adequate provision and valuation of forest goods and services;

(b) Called for improved cooperation in support of the management, conservation and sustainable development of all types of forests, and urged all countries to use national forest programmes, as appropriate, as a basis for international cooperation in the forest sector;

(c) Stressed the need for international cooperation in the adequate provision of ODA, as well as possible new and additional funding from the Global Environment Facility (GEF) and other appropriate innovative sources of finance for the effective development, implementation, monitoring and evaluation of national forest programmes;

(d) Encouraged countries to integrate suitable criteria and indicators for sustainable forest management, as appropriate, into the overall process of the formulation, implementation, monitoring and evaluation of national forest programmes, on a step-by-step basis;

(e) Urged countries to develop, test and implement appropriate participatory mechanisms for integrating timely and continuous multidisciplinary research into all stages of the planning cycle;

(f) Encouraged countries to elaborate systems, including private and community forest management systems, for planning, implementing, monitoring and evaluating national forest programmes that identify and involve, where appropriate, a broad participation of indigenous people, forest dwellers, forest owners and local communities in meaningful decision-making regarding the management of state forest lands in their proximity, within the context of national laws and legislation;

(g) Urged countries, particularly in developing countries and countries with economies in transition, to include capacity-building as an objective of national forest programmes, paying particular attention to training, extension services and technology transfer and financial assistance from developed countries, taking due account of local traditional forest-related knowledge;

(h) Encouraged countries to establish sound national coordination mechanisms or strategies among all interested parties, based on consensus-building principles, to promote the implementation of national forest programmes;

(i) Encouraged countries to further develop the concept and practice of partnership, which could include partnership agreements, in the implementation of national forest programmes, as one of the potential approaches for improved coordination and cooperation between all national and international partners.

B. Underlying causes of deforestation and forest degradation

Conclusions

18. The Panel noted the critical need to understand the underlying causes of deforestation and forest degradation, which are often country-specific. A focused approach is needed that concentrates on reversing the most damaging processes and promoting the most effective and beneficial measures. It is also important to recognize local initiatives that could counter current trends in deforestation and forest degradation, especially among indigenous and local communities.

19. Recognizing that poverty and demographic pressure are among the root causes of deforestation and forest degradation, sustainable development can play a key role in reducing pressure on forests and replacing the processes leading to deforestation and forest degradation. Each country, whether developing or developed, will have its own particular set of circumstances and opportunities for action. It is important to consider historical dimensions and to learn from experience. Many of the factors causing deforestation or forest degradation interact, and some are synergistic. Most causes are social and economic in character. Although some courses of action, such as unsustainable timber extraction, are linked to the forest sector itself, inappropriate policy choices and approaches in other sectors can also influence deforestation and forest degradation.

20. Production and consumption patterns, land tenure patterns, land speculation and land markets have a major influence on the access to and use of forest

products goods and services, as well as on deforestation. Other important factors in many regions include illegal logging; illegal land occupation and illegal cultivation; grazing pressures; unsustainable agriculture; the demand for fuelwood and charcoal to meet basic energy needs; refugee-related problems; mining and oil exploitation in forested countries not conducted in accordance with appropriate national legislation; and natural climatic events and forest fires.

21. The assessment of whether changes in forest cover are or are not beneficial should be made against a background represented by national policy frameworks for sustainable forest management and land-use plans, and should enable countries to identify the quantity and quality of forest required to provide the full range of benefits, goods and services needed now and in the future. The increasing pressure from demands for forest products and other forest goods and services, as well as for land for other uses, suggests a priority need to strengthen intersectoral decision-making affecting land use. Increasingly effective institutions for resource management, land use, research, education and extension will be an important part of sustainable forest management.

22. There are rational justifications for many changes in forest structure and cover. Different countries have different requirements, which alter over time and affect both the area and the nature of their forests. Both sustainably managed natural forests and forest plantations, as components of integrated land-use that takes account of environmental and socio-economic concerns, fulfil a valuable role in meeting the need for forest products, goods and services, as well as helping to conserve biological diversity and providing a reservoir for carbon. The costs, benefits and disbenefits of different types of forest management, including forest plantations, need to be appraised under different social, cultural, economic and ecological conditions. The role of forest plantations as an important element of sustainable forest management and as a complement to natural forests should be recognized.

23. The Panel recognized the importance of long-term changes in consumption and production patterns in different parts of the world, and their positive and negative effects on the sustainable management of forests. The long-term outlook is for steadily rising demand for forest products and other forest goods and services, and a declining area of forest for their production. The implications of that outlook should be reviewed in the context of the work being done by the Commission on Sustainable Development and other relevant initiatives concerned with the long-term supply of and demand for forest products and other forest goods and services.

24. Among the various international underlying causes of deforestation and forest degradation, discriminatory international trade and poorly regulated investment, as well as long-range transboundary air pollution, are important. Such factors as discriminatory international trade practices, trade distorting practices, structural adjustment programmes and external debt could indirectly influence deforestation and forest degradation. Market distortions, subsidies and relative prices, including those of agricultural commodities, as well as undervaluation of wood and non-wood forest products, can have a direct bearing on the management, conservation and sustainable development of all types of forests.

25. In many countries, there is a need for further analysis of the sequence of causes contributing to changes in the quantity and quality of forests, focusing attention on the action that might be most effective in halting damage and promoting beneficial change. Such analysis would be facilitated by the use of a comprehensive diagnostic framework, elements of which have been elaborated in the Secretary-General's reports to the Panel. That diagnostic framework would not only serve as a useful tool for countries to analyse deforestation and forest degradation but could also, in adapted forms, be useful for setting the objectives of national forest policies; for introducing a historical perspective into the analysis of the causes; for exploring the effects of policies in other sectors on deforestation and forest degradation; for refining criteria and indicators and methods of valuation in relation to national action plans for international agreements and conventions and generally as a powerful management tool for furthering the implementation of sustainable forest.

26. The diagnostic framework should be employed in a constructive, corrective and forward-looking manner. It would complement and strengthen other existing planning exercises, and could also be used, together with criteria and indicators, as a tool for the periodic assessment of progress. As a management tool, it should be developed voluntarily and should not be used as a basis for conditionality in ODA. Its development, however, should not delay action, and it may not be needed in countries where major direct or indirect causes have been identified, well understood and documented, or where deforestation is not viewed as a problem at the national level.

Proposals for action

27. The Panel urged countries, as relevant and appropriate, with the support of international organizations and the participation of major groups, where relevant:

(a) To prepare in-depth studies of the underlying causes at the national and international levels of deforestation and forest degradation;

(b) To analyse comprehensively the historical perspective of the causes of deforestation and forest degradation in the world, and other international underlying causes of deforestation and forest degradation, including transboundary economic forces;

(c) To provide new factual information on the significance of transboundary pollution.

28. The Panel urged countries:

(a) To assess long-term trends in their supply and demand for wood, and to consider actions to promote the sustainability of their wood supply and their means for meeting demand, with a special emphasis on investment in sustainable forest management and the strengthening of institutions for forest resource and forest plantations management;

(b) To recognize and enhance the role of forest plantations as an important element of sustainable forest management complementary to natural forests;

(c) To support the convening, as soon as possible, of a global workshop on the international underlying causes of deforestation and forest degradation, and their relationship to national underlying causes of deforestation and forest degradation.

29. The Panel also encouraged countries to undertake, as needed, the following activities:

(a) To formulate and implement national strategies, through an open and participatory process, for addressing the underlying causes of deforestation, and, if appropriate, to define policy goals for national forest cover as inputs to the implementation of national forest programmes;

(b) To develop mechanisms, such as environmental impact assessments, to improve policy formulation and coordination, through an open and participatory process;

(c) To formulate policies aiming at securing land tenure for local communities and indigenous people, including policies, as appropriate, aimed at the fair and equitable sharing of the benefits of forests.

30. The Panel also encouraged countries and international organizations:

(a) To provide timely, reliable and accurate information on the underlying causes of deforestation and forest degradation, where needed, as well as on the multiple roles of forests, as a foundation for public understanding and decision-making;

(b) To assist developing countries in promoting an integrated approach towards the formulation and application of national policy frameworks, and in conducting strategic analyses of relevant political, legal and institutional policies that have contributed to deforestation and forest degradation, as well as of policies that have had a positive effect.

31. The Panel:

(a) Encouraged countries to undertake case studies using the diagnostic framework described above in order to:

(i) Identify underlying causes of deforestation and forest degradation;

(ii) Develop and test the usefulness of the framework as an analytical tool in assessing options for utilization of forest and forest lands;

(iii) Refine it, disseminate the results and apply it more widely as appropriate;

(b) Urged developed countries, the United Nations Development Programme (UNDP) and other multilateral and international organizations, including regional development banks, to assist developing countries and countries with economies in transition in those activities;

(c) Invited interested parties to lend support, as appropriate, to the preparation of the programme of work for forest biological diversity of the Convention on Biological Diversity, with respect to analysing measures for mitigating the underlying causes of biodiversity loss, as stated in decision III/12 of the Conference of the Parties to the Convention.

C. Traditional forest-related knowledge

Conclusions

32. Traditional forest-related knowledge (TFRK) constitutes an important body of knowledge and experience relevant to many aspects of the Panel's mandate. TFRK should be broadly defined to include not only knowledge of forest resources but also knowledge of other issues that are considered relevant by countries based on their individual circumstances.

33. The Panel noted with concern that some communities with sustainable lifestyles based on TFRK have been undermined by the accelerated loss of forests resulting from the introduction of new technological changes and economic pressures, in the absence of adequate measures for conservation and sustainable management. It agreed that indigenous people and other forest-dependent people embodying traditional lifestyles should play a key role in developing participatory approaches to forest and land management. Such approaches should involve all relevant parties from both public and private sectors, and should focus on community forest management; land-use systems; research, training and extension; the formulation of criteria and indicators; and conflict resolution.

34. TFRK can provide a strong basis for sustainable forest management, and its potential to support actions should be reflected in national forest programmes. The Panel, however, recognized that the international and national communities are still in an early stage of identifying ways and means for the effective protection and use of TFRK, and of exploring the relationships between TFRK and sustainable forest management. That complex cross-cutting relationship involves natural and social sciences, culture, tradition and the environment.

35. The effective protection of TFRK requires the fair and equitable sharing of benefits among all interested parties, including indigenous people and other forest-dependent people embodying traditional lifestyles, forest owners and local communities. Certain conditions at the national level will need to be met if indigenous people and other forest-dependent people embodying traditional lifestyles, forest owners and local communities are to participate fully in agreements and to offer their TFRK for the benefit of other interested parties. Holders of TFRK will need to be represented by their own representatives; to feel secure in their land tenure arrangements; to be reassured that they have been accorded status equal to that of the other members of the agreements; and

to be convinced of a common purpose compatible with their cultural and ecological values.

36. TFRK is useful in locating valuable new products, and gaining access to them on fair and equitable terms can only benefit each country in its efforts to achieve sustainable development. Governments and others who wish to use TFRK should acknowledge, however, that it cannot be taken from people, especially indigenous people, forest owners, forest dwellers and local communities, without their prior informed consent. Ways and means to secure the effective protection of indigenous rights and the fair and equitable sharing of benefits arising from the use of TFRK, which many countries consider should incorporate appropriate payment to indigenous people and relevant local communities based on their intellectual property rights, should be identified in the context of international and national legal systems, which may include recognition of customary law and indigenous legal systems. International cooperation on TFRK and rights related to it must be consistent with obligations under the Convention on Biological Diversity and other relevant instruments.

37. The Panel noted the need to establish international mechanisms for the exchange of information on national experiences and mechanisms, including financial investment, so as to stimulate the application of TFRK in sustainable forest management and the development of products derived from it. Those matters are considered further in section II below.

38. There are difficulties surrounding the acquisition, storage, retrieval and dissemination of TFRK outside its place of origin, arising from a lack of effective measures to protect and manage TFRK and from the nature of TFRK, which is largely site-specific and culture-specific and not amenable to being digitized, stored in databases or accessed through clearing-house mechanisms. The Panel recommended further exploration of the feasibility and modalities of exchanges in that area.

39. The Panel recognized that the Convention on Biological Diversity contains several provisions, including articles 8 (j) and 10 (c), that are relevant to TFRK, which is a subset of the knowledge, innovations and practices referred to in article 8 (j) of the Convention, while the genetic resources of forest ecosystems are a subset of the genetic resources referred to in article 15. It noted the statement annexed to decision II/9 of the Conference of the Parties to that Convention, and accepted that the conservation and sustainable use of biodiversity, and the fair and equitable sharing of benefits derived from research and development and from the commercial utilization of biological resources fell, inter alia, within the purview of the Convention. It also recognized the need to avoid duplication or overlap with other relevant intergovernmental processes. Those matters are considered further in section V below.

Proposals for action

40. Recognizing that indigenous people and forest-dependent people who possess TRFK could play an important role in sustainable forest management, the Panel:

(a) Taking into account the decisions arising from the 3rd meeting of the Conference of the Parties to the Convention on Biological Diversity, in particular decisions related to the implementation of article 8 (j), invited Governments, international agencies, research institutions, representatives of indigenous people and forest-dependent people who possess TFRK, and non-governmental organizations to promote activities aimed at advancing international understanding on the role of TFRK in the management, conservation and sustainable development of all types of forests to complement activities undertaken by the Convention;

(b) Invited countries and relevant international organizations, especially the Conference of the Parties to the Convention, to collaborate with indigenous people and forest-dependent people who possess TFRK to promote an internationally acceptable understanding of TFRK, and to identify, respect, preserve and maintain TRFK, including innovations and practices that are relevant for the conservation of forest biological diversity and the sustainable use of forest biological resources;

(c) Invited countries to explore further, at appropriate levels, different options for the policy, institutional and legal frameworks that are required to support the application of intellectual property rights and/or other protection regimes for TFRK, the fair and equitable sharing of its benefits, and the possible development of formal agreements by which TFRK can be accessed;

(d) Urged countries, in implementing their forest programmes, to take measures to rehabilitate and protect TFRK, taking into account that an essential condition for the effective protection and rehabilitation of TFRK is the integrity and cultural survival of forest-dependent people;

(e) Called on countries, in the context of their national legal systems, to promote and provide opportunities for the participation, inter alia, of indigenous people, forest-dependent people who possess TFRK and forest owners in the planning, development and implementation of national forest policies and programmes, taking into account principles 2 (d) and 5 (a) of the Forest Principles;

(f) Called on countries, with the full support of relevant international organizations, to work with all interested parties to bring together knowledge and experience of the approaches that work in practice, including credit, rewards, the recognition of the fair and equitable sharing of benefits, and, where appropriate, the preparation of technical guidelines on TFRK application;

(g) Called on countries, with the assistance of international organizations, where appropriate, to support national, regional and international efforts that will enhance the capacity of indigenous people, forest-dependent people who possess TFRK and appropriate forest owners to participate, inter alia, in agreements that apply TFRK for sustainable forest management, and to promote partnerships among all interested parties;

(h) Encouraged countries to recognize and support traditional resource use systems incorporating TFRK, including, where appropriate, through the

development of new instruments and mechanisms that enhance the security of forest-dependent groups;

(i) Urged countries to work with communities and build on their knowledge to establish stronger linkages between traditional and emerging national sustainable forest management systems;

(j) Encouraged countries and relevant international organizations to identify ways to inventory, store, catalogue and retrieve TFRK, and to support its effective protection and application, including developing local and indigenous capacity, and to examine opportunities to apply TFRK related to the management of particular types of forests to other similar forest ecosystems, doing so only with the free and informed consent of the holders of TFRK. The Panel also encouraged countries and international organizations to work out a methodological framework of compatibility between TFRK and new technologies;

(k) Urged countries, with the support of international organizations, to promote research on TFRK in regional and national institutions, with the full involvement of the holders of that knowledge, to maintain and enhance the capacity of such institutions, and to advance the wider understanding and use of the knowledge gained;

(l) Urged countries, national institutions and academic centres to incorporate TFRK in forest management training as a way to sensitize forest managers to the importance of respect for and protection of TFRK; to the need to observe the principle of fair and equitable sharing of benefits; and to the advantages of using it and the disadvantages of ignoring it. They should also emphasize the importance of recognizing TFRK in developing national criteria and indicators for the sustainable management of forests within the context of national forest programmes, and, where appropriate, in forest management certification schemes;

(m) Invited countries, with the support of donors and international organizations, to assist financially and otherwise existing networks that are promoting the sharing of TFRK on mutually agreed terms, as well as the sharing of technology and profits arising from the use of such knowledge among concerned groups and institutions, in collaboration with all involved parties, including indigenous people and forest-dependent people who possess TFRK;

(n) Encouraged countries, in collaboration with indigenous people and forest-dependent people who possess TFRK, to promote digital mapping using geographic information systems and geographic position systems, combined, where appropriate, with social mapping for assisting with the establishment of forest holdings, assisting planning and management partnerships; and to assist in the location and storage of cultural and geographical information required to support the management, protection and use of TFRK;

(o) Invited the World Intellectual Property Organization (WIPO), together with the United Nations Conference on Trade and Development (UNCTAD), taking into account decision III/14 of the Conference of the Parties to the Convention on Biological Diversity, to undertake a study aimed at advancing international understanding of the relationship between intellectual property and TFRK, and to

develop ways and means to promote effective protection of TFRK, in particular against illegal international trafficking, and also to promote the fair and equitable sharing of benefits arising from such knowledge;

(p) Encouraged countries to undertake additional pilot studies on the relationship between intellectual property rights systems and TFRK, at the national level, in accordance with a decision made at the third meeting of the Conference of the Parties to the Convention;

(q) Requested the Secretary-General, in collaboration with the Convention, to produce a compilation of international instruments and national legislation, including draft legislation, pertaining to the protection and use of TFRK and the fair and equitable sharing of benefits arising from such knowledge, and encouraged countries to exchange information on national experiences in that field;

(r) Urged countries to consider developing mechanisms, subject to national legislation, to ensure the fair and equitable sharing with local and indigenous communities of benefits; including payments where appropriate, arising from the use of traditional technologies developed by them for sustainable forest management.

D. Fragile ecosystems affected by desertification and drought

Conclusions

41. Desertification and the effects of drought are widespread phenomena, affecting forests and other wooded land in arid, semi-arid and dry sub-humid regions. Such problems have global dimensions in that they affect most regions of the world and require collective action by the international community.

42. Forest-related action aimed at combating desertification and mitigating the effects of drought should address the causes of those phenomena in an integrated manner, and should consider the role of poverty along with land use policies, food security, the provision of fodder and fuelwood, the effects of non-sustainable production and consumption patterns, the impact of trade and trade relations, migration, refugees and many other economic, social and cultural factors. The Panel noted that forest fires continue to have a devastating impact on some forest ecosystems, in particular in countries south of the Sahara and in countries with dry forests in Mediterranean zones, although in other areas they may have positive effects on the vitality and renewal of forest ecosystems.

43. The Panel noted that in some countries, forest cover had been or was expanding as a result of community action backed by government support. In many areas, plantations of fast-growing trees have had good and cost-effective results in terms of soil protection. While recognizing that forest land rehabilitation would be required in many areas and that that would need international assistance, including financial resources and technology transfer to support local and national efforts, the Panel emphasized the need for prevention, rather than mitigation and restoration, wherever practicable, with

emphasis on improved and sustainable management of existing natural forest and other vegetation. The restoration of arid, semi-arid and dry sub-humid zones should not focus narrowly on afforestation but should also deal with broader aspects of forest ecosystem management, including social and economic issues. The Panel identified the need to strengthen research, including support to regional research networks, related to the identification of appropriate species for arid, semi-arid and dry sub-humid land restoration, the rehabilitation of existing vegetation types, and the potential of non-timber forest products. Education, training and extension systems can play an important role.

44. The Panel emphasized the need for an integrated approach to national forest and land-use programmes and national plans to combat desertification. It urged countries to promote coordinated, cross-sectoral action at the political and policy-making level to improve legislation and to accelerate implementation within the context of national sustainable development strategies. Recognizing the merits of bottom-up approaches involving all major groups concerned with the issues, along with top-down approaches, the Panel emphasized the need for national action programmes to draw more extensively on local and traditional knowledge and evaluate traditional agro-sylvo-pastoral systems, in accordance with the principles outlined in programme element I.3. Close collaboration was needed between forest and agricultural institutions, and support should be provided to farmers and herders. Protected areas need to be established and supported, where appropriate, in fragile and endangered ecosystems affected by drought and desertification, as part of in situ conservation strategies. The approaches should be supported by an enabling legislative and institutional framework that secures rights and access to land. Countries in regions affected by desertification and the effects of drought should propose initiatives and priorities for action, working in accordance with article 5 of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa.

45. The Panel considered that the problems of fragile ecosystems affected by desertification and drought must be addressed in close relationship with existing international conventions, especially the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change and above all the Convention to Combat Desertification. It emphasized the need for donors, international agencies and recipient countries to engage in adequate consultations in order to develop efficient and coordinated programmes of international cooperation that are consistent with those conventions, the Forest Principles and Agenda 21. The work carried out under those conventions and the work of the Panel should complement and enhance one another.

Proposals for action

46. The Panel:

(a) Urged countries and international organizations to undertake national and international action to address the complex issues related to dryland forest ecosystems in countries affected by desertification and drought, inter alia, by adopting an integrated approach to the development and implementation of national forest and/or dryland programmes and other forest and/or dryland policies, and by coordinating action, where appropriate, at the regional level;

(b) Called on countries to continue to analyse past experiences and to monitor trends in forests and related ecosystems affected by desertification and drought, including biophysical, ecological, economic, social, land tenure and institutional factors;

(c) Urged countries to establish protected areas to safeguard forest and related ecosystems, their water supplies, and historical and traditional uses in appropriate localities in areas affected by drought, particularly in arid, semi-arid and dry sub-humid regions;

(d) Called on countries, donors and international organizations to support education, training, extension systems and participatory research involving indigenous and local communities embodying traditional lifestyles in order to develop resource management approaches that will reduce the pressure on forests in fragile ecosystems affected by desertification and drought;

(e) Urged countries and international organizations to strengthen and further develop partnerships and collaboration between local communities, Governments, non-governmental organizations and other major groups in order to promote the sustainable management and regeneration of natural vegetation in ecosystems affected by desertification and drought;

(f) Urged donors, international agencies and recipient Governments to develop efficient and coordinated programmes of international cooperation and action on forests and related ecosystems affected by desertification and drought, within the context of the Convention to Combat Desertification and the broader mandate of the Panel, the Forest Principles and Agenda 21;

(g) Invited the Committee on Science and Technology of the Conference of the Parties to the Convention to Combat Desertification to support research on appropriate plant species for use in arid, semi-arid and dry sub-humid land restoration; on rehabilitation of existing vegetation; on related water management techniques; and on the potential for multipurpose trees and the supply of timber and non-timber forest products.

E. Impact of airborne pollution on forests

Conclusions

47. The Panel noted that airborne pollution is affecting forest health in many parts of the world in addition to Europe. A preventative approach is needed, taking account of economic factors including production and consumption patterns. The Panel emphasized the importance of the Convention on Long-Range Transboundary Air Pollution, and welcomed the widespread application of the critical loads approach adopted under that Convention. It commended the approach for consideration by countries whose forests are or may be affected by air pollution. The potential impact on forest health from inputs of nutrients and airborne pollutants, acting in combination with other processes, such as natural weathering and leaching, should be taken into account in forest planning and management.

48. The Panel emphasized the need to continue monitoring and evaluating the impact of airborne pollution on forest health wherever it has been demonstrated in the world, and the need for information on how the countries concerned have addressed such problems. The Panel also stressed the need for continuing action to reduce airborne pollution, including the transfer and use of the best available as well as future environmentally sound technologies on mutually agreed terms. The problem has to be solved by action outside the forests.

49. The Panel stressed the need for international cooperation, including information exchange; research and field data collection; evaluation of the socioeconomic and environmental impact of airborne pollution on forests; studies of ecosystem function where pollutant deposition threatens sustainability; the development of methods for assessing and monitoring national level criteria and indicators that relate airborne pollution to sustainable forest management; the dissemination of information to the public; the provision of access to existing data by potential users, including managers and policy makers; and technical assistance in order to help build capacity for research.

Proposals for action

50. The Panel:

(a) Encouraged countries to adopt a preventative approach to the reduction of damaging air pollution, which may include long-range transboundary air pollution, in national strategies for sustainable development;

(b) Encouraged countries to strengthen international cooperation for building scientific knowledge, such as techniques for monitoring and analysing airborne causes of deforestation and forest degradation, and to cooperate in activities related to the impact of air-borne pollution on forest health, including the provision of access to existing data by potential users, including managers and policy makers and the dissemination of information to the public;

(c) Recommended that existing regional programmes monitoring the impact of airborne pollution on forest health in affected countries should continue and be extended to other regions where necessary;

(d) Encouraged the development of methods for the assessment and monitoring of national-level criteria and indicators for airborne pollutants in the context of sustainable forest management;

(e) Recommended countries to consider entering into international agreements, as appropriate, on the reduction of long-range transboundary air pollution.

F. Needs and requirements of developing and other countries with low forest cover

Conclusions

51. Many of the issues arising under the present subsection also arise elsewhere in the present section and in section III below. The Panel emphasized that actions under the present section need to be coordinated with actions, inter alia, under the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the Convention to Combat Desertification.

52. The Panel recognized that there are both developed and developing countries with low forest cover. Low forest cover can arise as a result of natural ecological conditions, as well as of human activities, and the situation is constantly changing. Some countries are actively expanding their forest cover, while others are approaching qualification for entry into the low forest cover category.

53. The Panel felt that there was a need for more precise identification of countries categorized as countries with low forest cover. The definition of forest used by the Panel, based on the global forest resources assessment of the Food and Agriculture Organizations of the United Nations (FAO), is that it includes vegetation with 20 per cent and 10 per cent minimum tree crown cover for developed and developing countries, respectively. That definition does not have a strong scientific foundation, nor does it allow for comparability of data on a worldwide basis. Furthermore, there is no consistent way of classifying countries by the extent of forest, however defined, into those with low and those with high forest cover.

54. In some countries, economic development has been historically associated with the significant loss of forests, leading to disturbing consequences today in terms of land degradation and social, cultural and economic hardship. The restricted area of forests in countries with low forest cover results in reduced capacity for the production of timber and for the provision of goods and services, including the protection of watersheds, the supply of fuelwood, the maintenance of biological diversity and endemic species, and recreation and amenity. Moreover, many of the forest types in those countries are distinctive or even rare, and require national protective measures and international support, while the proportion included in nationally designated protected areas is often below average.

55. The Panel recognized the seriousness of problems faced by both developing and developed countries with low forest cover in satisfying their needs for forest goods and services. It also recognized that, owing to economic factors and circumstances, the impact of the problem in developing countries is much more severe than in developed countries. The needs of low-income and middle-income countries with low forest cover are likely to differ from those of high-income countries, and consequently, different sets of actions to address those needs will apply.

56. The Panel noted that national forest programmes may provide a good vehicle for addressing at least some of the needs and requirements of countries with low forest cover. They can provide a framework for analysing and considering alternative ways of satisfying diverse demands for forest products and other goods and services within and outside the forest sector. While additional information may be necessary as a basis for national forest programmes in countries with low forest cover, this should not prevent the preparation of interim plans based on information already available.

57. The Panel emphasized the importance of international cooperation to address the management, conservation and sustainable development of forests in low-income countries with low forest cover, particularly through financial assistance and the transfer of environmentally sound technology, as well as through the establishment of appropriate research and information networks. In that connection, the Panel noted that the increasing focus of private investments in countries with abundant forest resources has made forest ecosystems in developing countries with low forest cover particularly vulnerable. In those countries, ODA is and will continue to be the most important source of funding. National forest programmes should be considered as one of the main vehicles to channel and secure the effectiveness of the required financial and technical assistance.

Proposals for action

58. The Panel:

(a) Called upon FAO, in consultation with relevant organizations and countries, as appropriate, to develop a workable and precise definition of low forest cover, applicable to all countries and suitable for use in the forest resources assessment in the year 2000;

(b) Urged countries with low forest cover:

(i) To seek long-term security of forest goods and services through the development of national forest programmes for sustainable forest management, in accordance with the guiding principles set out in subsection IA above, taking into account the particular conditions of each country, defining as far as possible in those programmes their national requirements for a permanent forest estate, in those countries that may have a need to define a permanent forest estate as a policy goal;

(ii) To plan and manage forest plantations, where appropriate, to enhance production and provision of goods and services, paying due attention to relevant social, cultural, economic and environmental considerations in the selection of species, areas and silviculture systems, preferring native species, where appropriate, and taking all practicable steps to avoid replacing natural ecosystems of high ecological and cultural values with forest plantations, particularly monocultures;

(iii) To promote the regeneration and restoration of degraded forest areas, including by involving, inter alia, indigenous people, local communities, forest dwellers and forest owners in their protection and management;

(iv) To fully analyse and take into account the related social, economic and environmental implications and costs and benefits, when considering non-wood substitutes or imports of forest products;

(v) To establish or expand networks of protected areas, buffer zones and ecological corridors, where possible, in order to conserve biodiversity, particularly in unique types of forests, working in close liaison with the parties to the Convention on Biological Diversity and other relevant international environmental agreements;

(vi) In particular developing countries and countries with economies in transition, to embark on capacity-building programmes at national, subnational and local levels, including especially existing national institutions, to promote effective participation in decision-making with respect to forests throughout the planning, implementation, monitoring and evaluation processes, and taking full advantage of the wealth of traditional knowledge available in the country;

(vii) To develop adequate research and information systems based on reliable evaluations and periodic assessments, including the use of national-level criteria and indicators and establishing sectoral and cross-sectoral mechanisms for information exchange, in order to allow for timely decisions related to national forest policies and programmes;

(c) Urged developed countries with low forest cover that are nevertheless endowed with suitable land and climate conditions to take positive and transparent action towards reforestation, afforestation and forest conservation, while urging other developed countries, where appropriate, notably those with low forest cover but with limited land and unsuitable climatic conditions, to assist developing countries and countries with economies in transition, in particular countries with low forest cover, to expand their forest cover, taking into account principle 8 (a) of the Forest Principles, through the provision of financial resources and transfer of appropriate technology, as well as through the exchange of information and access to technical know-how and knowledge;

(d) Urged countries and international organizations to improve the efficiency of and procedures for international cooperation to support the management, conservation and sustainable development of all types of forests in developing countries and countries with economies in transition with low forest cover;

(e) Urged donor countries and multilateral and international organizations to facilitate and assist developing countries and countries with economies in transition with low forest cover, where required, in building capacity for data gathering and analysis so as to enable them to monitor their forest resources.

II. INTERNATIONAL COOPERATION IN FINANCIAL ASSISTANCE AND TECHNOLOGY TRANSFER

A. Financial assistance

Conclusions

59. The Panel emphasized that the issues of financial assistance and transfer of technology are cross-cutting, interlinked and essential for the management, conservation and sustainable development of all types of forests, particularly in developing countries and countries with economies in transition. The Panel reiterated that those cross-cutting issues are critical to progress in all the other programme elements within its terms of reference.

60. In proposing measures to address those issues, the Panel emphasized the need to take into account the Forest Principles and relevant chapters of Agenda 21. The Panel recognized that existing resources are insufficient to achieve the management, conservation and sustainable development of all types of forests. The Panel further recognized that there is a need for greater financial investment from all sources, as well as a need to improve the absorptive capacity of developing countries to use financial resources.

61. The Panel recognized that in developing countries, domestic resources for financing the management, conservation and sustainable development of all types of forest are scarce and international financial sources remain vital. It reiterated the need for external support through ODA and the provision of new and additional financial resources, and emphasized the need to mobilize new, innovative and additional forms of finance at the public, private, international, domestic and local levels. However, while recognizing the important potential in innovative financial packages and new types of public-private partnerships, the Panel emphasized the continuing importance of international public finance and of existing commitments to it, and the need to promote the predictability and continuity of flow of financial resources. The catalytic and leveraging roles of international public funding remain essential for developing countries. It recognized that more effective use of available finance is conducive to attracting additional resources.

62. The financing needs for sustainable forest management at the national level should, as far as possible, be met by the revenue generated by the forest sector itself, be it the public or private sector. Some countries, with valuable forest estates and stronger economies, have much greater potential for generating private-sector and domestic public investment than others. National forest programmes and similar policy instruments can be an important policy tool, and can serve as a means of promoting, prioritizing and coordinating both public and private financial investments. Community financing is also an important element in enhancing the sustained productivity of forest resources. Experience suggests that despite their low income level, many forest-dependent communities can mobilize substantial labour, material and capital resources for forest development, and appropriate policy changes can enhance that potential.

63. The Panel noted that, in general, private capital flows are growing and are increasingly greater than public funding, but are distributed unevenly among

developing countries. That trend is also visible in the case of private investment in forests. The Panel recognized, therefore, that it is critical for countries to take the necessary measures to introduce appropriate policies and create an enabling environment to attract such private-sector investment. Policies that address long-term land tenure rights and encourage local community investment in sustainable forest management could mobilize significant financing. Investment in forests may be encouraged by voluntary codes of conduct for sustainable forest management, stronger national regulations and enforcement, full cost internalization in the pricing of renewable resources and various incentives. Policies and regulations should be carefully evaluated before implementation to avoid negative social and environmental impacts and market distortions, which would create disincentives.

64. The Panel underscored the need to fulfil the financial commitments of Agenda 21, especially chapter 33, with the aim of achieving the management, conservation and sustainable development of all types of forest, including, where appropriate, the protection of representative forest ecosystems. Efforts in developing countries to secure additional financial resources and technology at domestic level need to be strengthened, and should be supplemented from international sources. ODA remains a main source of external public funding, and has as a principal aim alleviating the poverty that is one of the main causes of deforestation. It will continue to play an important role in supporting forest-related activities in developing countries, especially where it is difficult to attract financing from other sources, for example, in developing countries, with low forest cover. The Panel expressed its concern that funding levels, including ODA, are insufficient and declining, and that sustainable forest management is not given sufficient priority in ODA. While there is a continuing challenge to ensure that ODA funds for forest sector are used as efficiently as possible, that is independent from the issue of trends in international public sector financing. Forest-related projects that have global environmental benefits should also be supported through GEF programmes, under the guidance provided by the conferences of parties of the relevant international instruments.

65. The Panel emphasized the need to examine ways to enhance international cooperation. It stressed the need for the international community to find durable solutions to the debt problem of developing countries in order to provide them with the needed means for management, conservation and sustainable development of all types of forests. Other forms of innovative financing should also be explored. Market-based instruments, such as taxes, levies, user fees and domestic public investments, could generate additional financial resources to support activities for sustainable forest management and conservation. A whole range of options relevant to specific national conditions warrants further examination. Adequately valuing forest resources and creating markets that reward sustainable forest management would contribute to the management, conservation and sustainable development of all types of forests, and would generate needed public resources.

66. The Panel emphasized that in-country coordination and cooperation among donors is crucial in view of the need to make the best use of limited financial resources. National forest programmes provide a good basis in many countries for national and international cooperation, including setting priorities for

financial assistance and technology transfer between recipient countries and donors.

Proposals for action to strengthen financial assistance

67. The Panel:

(a) Recalled the Rio Declaration on Environment and Development and relevant chapters of Agenda 21, as well as paragraph 10 of the Forest Principles, which states that new and additional financial resources should be provided to developing countries to enable them to sustainably manage, conserve and develop their forest resources, including through afforestation, reforestation and combating deforestation and forest and land degradation;

(b) Urged recipient countries to prioritize forest activities or national resources development strategies that would favour sustainable forest management and related activities in programming the ODA available to them, and also urged donor countries and international organizations to increase the proportion and availability of their ODA contribution to programmes supporting the management, conservation and sustainable development of all types of forests in order to respond to increased priorities for sustainable forest management in recipient countries;

(c) Requested the relevant United Nations organizations, international financial institutions, other international organizations and the donor community to work with developing countries, on the basis of national forest programmes, to identify their needs for sustainable forest management, estimate the resources required to finance such needs and identify the resources available to them for such purposes, including ODA;

(d) Urged international organizations and international financial institutions to use national forest programmes, as appropriate, as a framework for the support and coordination of forest-related activities;

(e) Encouraged countries, through appropriate channels, to support increased and improved programmes promoting the management, conservation and sustainable development of forests and related activities in international organizations and international financial institutions, whose programmes should consider further concessional lending for the forest sector;

(f) Invited UNDP and the Bretton Woods institutions, together with other relevant international organizations, to explore innovative ways to both use existing financial mechanisms more effectively and generate new and additional public and private financial resources at the domestic and international levels in order to support activities for the management, conservation and sustainable development of all types of forests;

(g) Recognized the importance of increasing resources available to developing countries for promoting the management, conservation, and sustainable development of all types of forests, welcomed the progress that has been made in devising and implementing debt relief initiatives, and bearing in mind General Assembly resolution 50/92, urged the international community, particularly the

creditor countries and international financial institutions, as well as commercial banks and other lending institutions, to continue the implementation of various measures aimed at effective, equitable, development-oriented and durable solutions to the external debt and debt-servicing problems of developing countries, particularly the poorest and heavily indebted countries, including exploring the opportunities for innovative mechanisms, such as debt-for-nature swaps related to forests and other environmentally oriented debt reduction programmes.

68. The Panel also discussed the proposal that an international fund be established to support activities for the management, conservation and sustainable development of all types of forests, particularly in developing countries. The following options for action were discussed, without a consensus being reached on those or other possible procedures:

(a) To urge the establishment of such a fund;

(b) To invite the international community to discuss the proposal;

(c) To pursue action to enhance funding in other ways, inter alia, as proposed in paragraph 67 (f) above.

Proposals for action to enhance private-sector investment

69. The Panel:

(a) Urged all countries, within their respective legal frameworks, to encourage efforts by the private sector to formulate, in consultation with interested parties, and implement voluntary codes of conduct aimed at promoting sustainable forest management through private-sector actions, including through management practices, technology transfer, education and investment;

(b) Urged countries to explore mechanisms, within their respective legal frameworks, to encourage their private sector to act consistently with sustainable forest management and to invest financial resources generated from forest-based activities in actions that support sustainable forest management;

(c) Urged countries to explore mechanisms, within their respective legal frameworks, to encourage the reinvestment of revenues generated from forest goods and services back into the forests where those revenues were generated;

(d) Invited developing countries to promote policies and regulations aimed at creating a favourable environment to attract the domestic and foreign private sectors, as well as local community investment, for sustainable forest management, environmentally sound forest-based industries, reforestation, afforestation, non-wood forest product industries, and conservation and protection of forests;

(e) Urged developed countries to formulate and create incentives, such as loan and investment guarantees, to encourage their private sector to invest in sustainable forest management in developing countries, as well as in countries with economies in transition.

Proposals for action to enhance national capacity and national coordination

70. The Panel:

(a) Urged recipient countries to establish country-driven national forest programmes that include priority needs and that serve as an overall framework for forest-related policies and actions, including the coordination of financing and international cooperation, and urged donor countries and international organizations to support national initiatives to create national forest programmes and policy framework in developing countries;

(b) Encouraged countries in a position to do so to continue to develop and employ appropriate market-based and other economic instruments and incentives to increase rent capture and mobilize domestic financial resources in support of sustainable forest management, as well as to reduce social costs and negative environmental impacts due to unsustainable forest and land management practices;

(c) Encouraged countries, within their respective legal frameworks, international organizations and financial institutions, to enhance, subject to national legislation, community financing as an important strategy to promote sustainable forest management, and to establish policy and programmatic mechanisms and instruments that facilitate local investments in sustainable forest management by, inter alia, indigenous groups and forest owners;

(d) Suggested that recipient countries, where appropriate, identify a national authority responsible for in-country coordination in the deployment of financial resources, including ODA, and in requests for external assistance;

(e) Urged developed countries, international organizations and international financial institutions to support the efforts of developing countries in capacity-building in the management, conservation and sustainable development of their forests.

Proposals for action to enhance international cooperation

71. The Panel:

(a) Called for enhanced coordination, collaboration and complementarity of activities among bilateral and multilateral donors and among international instruments related to forests, notably the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, the Convention to Combat Desertification and the International Tropical Timber Agreement;

(b) Urged recipient and donor countries to jointly explore, as a priority activity, appropriate indicators for monitoring and evaluating the adequacy and effectiveness of forest programmes and projects at the national and local levels, supported by international cooperation in financial assistance and technology transfer;

(c) Encouraged countries to explore the feasibility of innovative financial initiatives to support the implementation of national forest programmes.

B. Technology transfer and capacity-building and information

Conclusions

72. There is an unprecedented accumulation of technological capability in the world today, including for forestry. However, much of it remains largely unrecognized, underutilized and inadequately shared. Dissemination of those technological innovations is critical. The Panel emphasized that the transfer of environmentally sound technology in the forest sector is an important part of strategies for enabling countries to manage, conserve and sustainably develop their forests. The potential of particular technologies for transfer needs to be assessed in consultation with all interested parties, such as Governments, non-governmental organizations, the private sector, scientists and local communities.

73. The Panel noted that as new technologies are largely originated from the North, in particular in private domain, there is a need for strengthening North-South cooperation in technology transfer under favourable terms, including on concessional and preferential terms, for developing countries, as mutually agreed. However, owing to similarities of forest types, institutions and culture, there is also a considerable potential for South-South cooperation in conjunction with and as a complement to North-South cooperation.

74. The Panel noted that developed countries bear a special responsibility for facilitating the creation of conditions for the conservation of forest biological diversity and sustainable use of forest biological resources, inter alia, through constructive approaches to the transfer of technologies to strengthen the capabilities of indigenous people, forest dwellers, forest owners and local communities for sustainable forest management.

75. The Panel agreed that established priority in technology transfer and capacity-building should be continuously reviewed, and could include: information dissemination to improve forest and land-use planning and improvement of forest yields; technology and methods that reduce environmental damages due to current forestry practices; conservation and protection; native species research, including biotechnology, for tree improvement; rehabilitation and restoration of natural forest ecosystems; reforestation and nursery development; technology and methods for retaining forest values, including biological diversity; incorporation of indigenous knowledge in forest management; utilization, rehabilitation, restoration and regeneration of natural forest ecosystems; new and renewable sources of energy, in particular fuelwood and its appropriate substitutes; environmentally sound forest harvesting technologies; enhancement of technologies regarding wood processing; the development of new non-wood and wood forest products to promote techniques and design in order to add more aggregate value for forest products; and the development and implementation of national forest strategies.

76. The Panel emphasized the need to review and improve information systems. Attention should be given to worldwide access to information systems that would encourage effective implementation of national forest programmes, increased private-sector investment, efficient development and transfer of appropriate technologies, and improved cooperation. Internet-based information systems

should allow easy access and information-sharing among multilateral agencies, countries' institutions, non-governmental organizations and other interested parties.

Proposals for action to enhance technology transfer and capacity-building

77. The Panel:

(a) Urged developed countries to promote, facilitate and finance, as appropriate, access to and the transfer of environmentally sound technologies and corresponding know-how to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed, taking into account chapter 34 of Agenda 21 and paragraph 11 of the Forest Principles;

(b) Encouraged countries, where needed, to assess and identify their national technological requirements and capabilities in order to achieve the management, conservation and sustainable development of their forests. The assessment and identification of specific technology needs should be consistent with priorities in national forest programmes;

(c) Called for the strengthening of North-South cooperation and the promotion of South-South as well as trilateral North-South-South cooperation in forest-related technology transfer, through public and private-sector investment and partnerships, joint ventures, exchange of information and greater networking among forest-related institutions, taking due note of related work being conducted in other international forums, including the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change;

(d) Called upon countries to formulate policies and incentives that encourage all concerned to develop and use environmentally sound technologies;

(e) Called for greater emphasis on national and local capacity-building in the development and implementation of national forest programmes and in international cooperation programmes, as well as in the development of mechanisms for the dissemination and adaptation of technologies to national and local conditions;

(f) Invited Governments, within their respective legal frameworks, and international organizations, in consultation with countries, to consider supporting indigenous people, local communities, other inhabitants of forests, small-scale forest owners and forest-dependent communities by funding sustainable forest management projects, capacity-building and information dissemination, and by supporting direct participation of all interested parties in forest policy discussions and planning;

(g) Urged United Nations organizations, with the support of the international financial institutions, to prepare inventories of the most appropriate forest-related technologies, as well as the most effective methods of transfer of those technologies to developing countries among Governments, between Governments and private sector, and within the private sector.

Proposals for action to improve information systems

78. The Panel:

(a) Invited relevant international organizations and international financial institutions to review and initiate the development of improved forest information systems with a view to enhancing coordination and data-sharing among interested parties regarding the implementation of national forest programmes, ODA programming, the provision of new and additional financial resources, increased private-sector investment, efficient development and transfer of technology;

(b) Urged developed countries and appropriate international organizations to establish mechanisms to assist the interpretation and dissemination of information relevant to the management, conservation and sustainable development of all types of forests to countries and interested parties who have difficulties in accessing internationally available information, including dissemination through electronic means;

(c) Invited members of the informal high-level Inter-Agency Task Force on Forests, including FAO, the International Tropical Timber Organization (ITTO), UNDP, the World Bank, the secretariat of the Convention on Biological Diversity, the United Nations Environment Programme (UNEP) and other relevant international bodies to facilitate the provision of a better flow to both the policy and operational levels of synthesized information on programme progress, policy development, best management practices and financial strategies for forest sector, for both the public and private sectors, including through the establishment of specialized databases.

III. SCIENTIFIC RESEARCH, FOREST ASSESSMENT, AND THE DEVELOPMENT OF CRITERIA AND INDICATORS FOR SUSTAINABLE FOREST MANAGEMENT

A. Assessment of the multiple benefits of all types of forests

Conclusions

79. The Panel emphasized that national inventories are an important basis for effective national forest programmes. Assessment of the actual and potential conditions of all types of forests is central to sustainable forest management and to a wide range of other considerations related to forests and forest ecosystems at the local, national, regional and global levels. Inadequate recognition of the contribution of forests to national economies has in many cases led to deforestation, forest degradation and underinvestment in forest management.

80. The database on forest types in both developed and developing countries is uneven. Much attention is still given to timber and forest cover, whereas other goods and services provided by forests, such as fuelwood, the sustainable use and conservation and the fair and equitable sharing of benefits of biological diversity, soil and water protection functions, and carbon sequestration and

sinks, as well as other social, cultural and economic aspects, are rarely covered and need to be considered.

81. Forest assessments at the national level should adopt an integrated and holistic multidisciplinary approach, and should be user-oriented and demand-driven. Such assessments should be transparent and accessible to all interested parties. Further study is needed to define the levels of precision required and the specific needs of different users, including forest managers. Assessments should fully utilize the data already collected and analyses already carried out by local, national, regional and international institutions. Efforts should be made to harmonize approaches to data collection and analysis in order to enhance comparability.

82. The Panel emphasized that assessment data already in the public domain, including remote-sensing information, should be disseminated effectively. The use of existing FAO data, in combination with other data sets, offers a rich potential to address urgent questions in a cost-effective manner. The Panel also recognized that data interpretation in response to user needs is necessary. Consequently, a study of uses and categories of users of forest resources and related information at the international, regional, national and local levels is required. This would be particularly important when discussing new types of information to be included in the global forest resources assessment.

83. International and national forest assessments should take account of appropriate international, regional, subregional and national-level criteria and indicators for sustainable forest management. The need to include qualitative as well as quantitative information on forest goods and services was stressed, and should be addressed in future assessments. Site-specific field testing is also needed in order to ensure the adaptation of reliable parameters in forest assessments. Emphasis should be placed on the provision of reliable and high-quality data.

84. The Panel further noted that capacity-building at the national and local levels is important in many countries, and should involve all interested parties, including forest owners, local communities, indigenous people and other major groups. Forest assessments should be multidisciplinary, and should involve data collection and analysis by local, national and possibly regional as well as international institutions. Enhanced national capacity is considered essential for high-quality national inputs to the global forest resources assessment for the year 2000 being organized by FAO.

85. The Panel expressed strong support for the global assessment and for the arrangements being made following the recommendations of the FAO Expert Consultation on Global Forest Assessment held in Finland in June 1996, and urged FAO, in consultation with countries and interested organizations, to prepare a strategic plan for assessing global forest resources and a detailed plan for the implementation of the global assessment for the year 2000, including detailed cost and funding options and target dates. The Panel noted the importance of eco-floristic zone and vegetation maps as tools for the assessment process, together with appropriate qualitative parameters and criteria and indicators defined through the Helsinki and Montreal processes, the Dry Zone of Africa initiative, the Tarapoto Proposal and the ITTO guidelines.

86. The Panel took note of the recommendation of the Expert Consultation to maintain the current 10-year interval between global forest resources assessments. However, the possibility of rolling assessments by region could also be considered, together with the possibility of updating of data at regular intervals, taking into account the financial and resource implications for FAO, as well as for developing and developed countries, in meeting such requirements. The global assessment for the year 2000 should be a partnership exercise facilitated by FAO but also involving United Nations organizations, national institutions and other interested parties, including relevant major groups. Cooperation at the national level should involve all interested parties, both within and outside the forest sector.

87. While recognizing the value of remote-sensing techniques and geographical information systems for forest assessments, the Panel noted the need for ground validation of some parameters. Assessments impose a significant financial and technical burden on developing countries, and should therefore be carried out in the most cost-effective manner and should be assisted by developed countries and international organizations. Coordination is needed between forest information systems and other relevant systems, and required both North-South and South-South cooperation.

88. Resources available for the global assessment for the year 2000 in FAO's regular budget and at the national level are limited. The Panel stressed the urgency of identifying existing or additional financial resources that would ensure an effective assessment. Consideration should be given to establishing methods by which users would provide resources for data collection, and to more effective utilization of existing resources and capabilities of organizations and institutions, both in the public and private sectors, to assist FAO in executing the assessment.

Proposals for action

89. The Panel:

(a) Encouraged countries to integrate national-level criteria and indicators for sustainable forest management in national forest assessments, including qualitative indicators, where appropriate;

(b) Encouraged all countries, where appropriate and on a step-by-step basis, to improve national forest resources assessment, forest statistics and the capacity to analyse and make proper use of forest resources information, and encouraged donor countries and international organizations to support those initiatives;

(c) Urged countries, universities and relevant organizations and major groups to strengthen research on forest inventory and monitoring techniques with a view to expanding the scope and improving the quality of forest assessments;

(d) Requested FAO, in consultation with Governments and relevant organizations, including UNEP, to prepare and distribute a detailed plan for the implementation of the global forest resources assessment for the year 2000. The plan should provide for the inclusion of a broad range of forest values,

including non-timber values, and should include detailed cost and funding options associated with potential new parameters, actions, targets and responsibilities for carrying out the assessment consistent with the recommendations of the Expert Consultation and with due regard to the requirements arising from internationally or regionally agreed criteria and relevant indicators for sustainable forest management;

(e) Requested FAO to implement the global forest resources assessment 2000, in collaboration with international organizations, countries and other organizations with competence in assessments, and to share the results of the assessment effectively with the international community;

(f) Requested FAO, in consultation with countries and relevant international organizations and in an open and transparent manner, to formulate an internationally acceptable set of definitions of key terms used in the assessment of all types of forests and their resources, and to promote their adoption;

(g) Urged FAO, in partnership with other international organizations, the Intersecretariat Working Group on Forest Statistics, national institutions and non-governmental organizations, to address the need for better coordination and avoidance of overlap between forest and other related information systems, and for clearer prioritization in data collection;

(h) Encouraged countries to begin a consultation process with all interested parties at the national, subnational and local levels to identify the full range of benefits that a given society derives from forests, taking the ecosystem approach fully into consideration.

B. Forest research

Conclusions

90. The Panel recognized the need to strengthen research, which was relevant to all the programme elements of its programme of work. There was need for a more comprehensive and focused approach, including support to regional research networks. Enhanced international efforts for more focused and effective funding and coordination of forest-related research and development were also required.

91. The Panel also took note of the recommendations on priorities for scientific research on biological diversity and forests made by the Conference of the Parties to the Convention on Biological Diversity. The Panel also recognized the important role of the Convention to Combat Desertification in addressing many of the forest-related scientific issues and research needs as regards arid zones.

92. The Panel recognized that institutional needs include the strengthening of existing national research institutions; subregional and regional networks; joint research ventures; approaches to enhancing and strengthening existing international, regional, subregional and national forest research institutions' participation in an international network dedicated to the conservation and

sustainable development, management and utilization of forests and forest policy research; and the creation of appropriate mechanisms that could enable research findings to reach policy and field levels more effectively and could support concrete action.

93. The Panel recognized the importance of developing and identifying research priorities at all levels: national, with the involvement of local communities and other interested parties; regional; and international. The Panel noted that research priorities relevant to further understanding and implementation of chapter 11 of Agenda 21 and the Forest Principles that are in need of comprehensive intergovernmental examination include the development of criteria and indicators for sustainable forest management, including their testing at the field level in pilot studies; integrated site-specific socio-economic and biophysical studies to explore the relationship between human development and forests; periodic forest assessment; valuation of forests and forest resources; the use of forest valuation in national resource accounts; community participation, including the adoption of participatory appraisal and other participatory techniques to determine research and technology development agendas; TFRK; forest conservation, including human impact on protected forest areas; consideration of the long-term impacts of pervasive external stresses, such as climate change, ozone depletion and air pollution, on forest health, productivity and biodiversity; examination of trends in the supply of and demand for forest products; forest policy at the national, regional and global levels; and environmentally sound technologies for forest-based industries, including cost-effective processing techniques.

Proposals for action

94. The Panel:

(a) Requested the Centre for International Forestry Research, in collaboration with relevant organizations and in consultation with a group of internationally recognized experts, as well as in conjunction with national, regional, intergovernmental and non-governmental bodies, to develop as soon as possible mechanisms to:

(i) Guide the identification and definition as well as prioritization of global and eco-regional interdisciplinary research problems, taking into account national priorities and closely linked to practical and operational forest management issues;

(ii) Promote consortia or networks to lead and organize global forest research and ensure that results are made available to all users;

(iii) Build global capacity for forest research and develop new and innovative means for disseminating information and technologies;

(iv) Mobilize resources to accomplish the above objectives;

(b) Called on the Conferences of the Parties to the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change and the Convention to Combat Desertification, within their areas of competence,

to promote research and analysis undertaken by those Conventions and to address gaps in existing knowledge where relevant to their mandate;

(c) Urged the United Nations system, international financial institutions and countries to examine the need to expand the capacity of existing research institutions at the regional and subregional levels, and where appropriate the establishment of new regional/subregional centres for research, development and extension, including for biological diversity and forest products and other forest goods and services;

(d) Encouraged countries and regional and international research organizations to extend on-site research and to enhance its prioritization and the application of its results, with the involvement of all interested parties, in the planning, implementation, monitoring and evaluation of research so as to enhance its relevance and impact.

C. Methodologies for the proper valuation of the multiple benefits of forests

Conclusions

95. The Panel stressed that forests provide a wide range of benefits, not all of which are easy to quantify. The costs associated with deforestation, forest degradation and changes in forest quality, in terms of losses of biological diversity, impaired biological functions and reduced social and environmental values are not adequately measured by present methodologies. However, that shortcoming is due as much to the inability to assess the nature and significance of biophysical, ecological, economic and social impacts resulting from forest change as to uncertainty about how to assess their costs.

96. The Panel recognized the importance of the services provided by forests, including those relating to biological diversity and global climate regulation, and the potential for developing mechanisms to translate those values into monetary terms to encourage forest owners, forest dwellers, indigenous populations and local communities to conserve forests and manage them sustainably. Further discussion on those issues should take place in the context of the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change. The Panel took note of the input received from the Conference of the Parties to the Convention on Biological Diversity with respect to the development of methodologies for valuing forest biodiversity.

97. Undervaluation of forest goods and services and of other forest attributes, including non-market benefits, impedes sustainable forest management. The Panel recognized the difference between value and price, and noted that market mechanisms were not always appropriate or available to give monetary expression to key forest values, leading to the misconception that sustainable forest management is expensive and not cost-effective.

98. The Panel emphasized that the economic value of forests depends on the characteristics of particular forest areas and their locational relationships

with people and markets. Those characteristics vary both spatially and in time, and as a result forest valuation estimates are usually site-specific and time-specific. Nevertheless, there is considerable benefit in different countries sharing experiences, with the application of particular valuation techniques and instruments designed to capture a higher share of benefits for forest owners and forest-dwelling people.

99. A variety of methodologies has been developed to aid in the valuation of forest benefits that were previously considered intangible and not amenable to measurement. They can be used in all types of forests to improve the description of a wide range of social, cultural and environmental benefits, including those associated with hydrological functions, soil conservation, biological diversity and amenity. While those methodologies have many limitations, they could help improve decision-making by more clearly defining the costs and benefits associated with different patterns of forest use, and by indicating the scope for applying various measures to internalize environmental and social costs. The results of that valuation, when applied as a neutral tool, are an important potential source of information to all interested parties, and for increasing public awareness, particularly about currently non-marketable forest goods and services.

100. Although the Panel recognized the potential usefulness of forest valuation methodologies, it felt that their complexity and the costs involved may limit their widespread application. The Panel emphasized that innovative and simple scientific valuation methods were needed, especially those related to criteria and indicators and national forest programmes. Expensive valuation exercises should not be performed at the expense of more pressing basic needs, such as the development and application of reliable data systems and the development of strategies and mechanisms to achieve sustainable forest management.

101. New forest valuation methodologies should take into account the following criteria: neutrality and scientific validity, practical applicability, simplicity and clarity, multidisciplinarity, cost-effectiveness, and orientation towards currently non-marketable goods and services.

102. The Panel noted the need for international cooperation in the development of methodologies for the valuation of forest goods and services and their inclusion in national accounts. That could include training for staff as well as decision makers, and work on ways and means to promote public awareness. The need to exchange experience and establish pilot studies and schemes was emphasized.

103. The Panel expressed support for national forest-resource accounting as a means of providing strategic information for forest policy and management at the national and subnational levels, and of creating awareness of the value of forest goods and services.

Proposals for action

104. The Panel:

(a) Encouraged countries, in collaboration with international organizations, to make use of available methodologies to provide improved estimates of the value of all forest goods and services and allow for more informed decision-making about the implications of alternative proposals for forest programmes and land-use plans, taking into account that the wide range of benefits provided by forests are not adequately covered by present valuation methodology, and that economic valuation cannot become a substitute for the process of political decision, which includes consideration of wide-ranging environmental, socio-economic, ethical, cultural and religious concerns;

(b) Requested international organizations and relevant institutions to prepare comprehensive documents on the available forest valuation methods and data-sets required for the evaluation of forest goods and services, in particular those that are not traded in the marketplace;

(c) Invited countries and relevant international organizations and institutions to promote research to further develop forest valuation methodologies, in particular those related to deforestation and forest degradation, erosion, and criteria and indicators, taking into account the particular circumstances of each country.

D. Criteria and indicators for sustainable forest management

Conclusions

105. The Panel noted the widespread international interest in and support for the development and implementation of criteria and indicators for sustainable forest management. It drew attention to the dynamic nature of that process, and emphasized that the current momentum of action must be sustained.

106. The Panel recognized that criteria and indicators provide a conceptual framework for policy formulation and evaluation, and should be considered as useful tools for assessing trends in forest conditions, for reporting on the state of forests and for achieving sustainable forest management. Criteria define the essential elements of sustainable forest management, while indicators provide a basis for assessing actual forest conditions. When combined with specific national goals, criteria and indicators also provide a basis for assessing progress towards sustainable forest management. Criteria and indicators can therefore play an important role in defining the goals of national forest programmes and policies, and evaluating the effectiveness with which they are implemented. Because they reflect components of sustainable forest management, they collectively contribute to its development as a concept.

107. There is a need for a broad spectrum of quantitative, qualitative and descriptive indicators covering social, cultural, economic, ecological, institutional, legal and policy elements, including land tenure. Aspects of forests and woodlands that are essential in meeting the subsistence needs of indigenous people, forest dwellers and other local communities, including forest owners, require special attention in some countries. In many national, regional and international initiatives, both quantitative, qualitative and descriptive indicators have already been established.

108. While recognizing that national-level criteria and indicators may play an important role in clarifying issues related to forest certification and the labelling of forest products, the Panel emphasized that the development of criteria and indicators is primarily intended for promoting and monitoring sustainable forest management, and not for imposing certification or labelling schemes for forest products. Criteria and indicators are not performance standards for certifying management at any level, and should not be made a basis for restriction of trade. The Panel also emphasized that criteria and indicators for sustainable forest management should not be used as grounds for conditionality in the provision of ODA.

109. The Panel stressed the need for further efforts to reach a common international understanding of key concepts, definitions and terms used in formulating and developing criteria and indicators for sustainable forest management, and methodologies for data collection. Those terminologies and approaches must be compatible with terminologies used in other related fields, such as inventory, assessment and valuation, environmental assessment, national forest programmes, land-use plans and trade-related forest issues.

110. The Panel welcomed the efforts made to clarify the links between the criteria and indicators appropriate at the national level and those applicable to the subnational and forest management unit/operational levels, and emphasized that these should be compatible. It recognized, however, that those links will vary from country to country, and may require further examination. Criteria and indicators should be formulated through a transparent process involving all interested parties, including forest dwellers, indigenous people and local communities, as well as forest owners and other major groups, where applicable. Criteria and indicators for application at all levels should be practical, scientifically based and cost-effective, and should reflect, inter alia, economic, social and ecological circumstances.

111. The Panel noted that a number of countries are participating actively in international and regional initiatives for defining and implementing national-level criteria and indicators for sustainable forest management. That cooperation has enabled countries to benefit from the experience of others and at the same time bring new dimensions and ideas into international processes. While recognizing that the countries currently involved are at different stages in the process, the Panel stressed the need for further progress towards consensus on concepts, terms and definitions. The Panel also urged continuing efforts to involve countries and regions that are not yet participating in such initiatives.

112. The Panel placed particular emphasis on the need to involve regions and subregions with distinctive ecological and geographical characteristics, and countries with low forest cover. It also agreed that the development of appropriate criteria and indicators for application at the regional levels, in particular for forests in similar ecological zones, should be considered. The Panel also emphasized the need for efforts to enhance comparability and compatibility between various international and regional processes on the development and implementation of criteria and indicators, and stressed the importance of mutual recognition among sets of criteria and indicators as tools for assessing trends in forest management and conditions at the national level;

and on transparent methods for the measurement of indicators and for the collection, assembly, storage and dissemination of data.

113. The Panel recognized that there needed to be consistency in the methodology employed in global forest assessments. It supported the promotion of ways and means to maximize the exchange of information, experience and technical knowledge at the global level, in particular the promotion of best forest practices for sustainable forest management.

114. The Panel had divergent views on the merits of a core set of criteria and indicators for use at the global level, while recognizing that dialogue should continue.

Proposals for action

115. The Panel:

(a) Encouraged countries to proceed to prepare, through a participatory approach, national-level criteria and indicators for sustainable forest management, and, taking cognizance of specific country conditions and on the basis of internationally and regionally agreed initiatives, to initiate and to implement them, where appropriate, while recognizing that further scientific and technical examination, including field testing, will itself provide valuable experience and assist in further refinement and development;

(b) Urged countries to promote, as appropriate, the use of internationally, regionally, subregionally and nationally agreed criteria and indicators as a framework for promoting best forest practices and in facilitating sustainable forest management; to encourage the formulation and implementation of criteria and indicators on a cross-sectoral basis and with the full participation of all interested parties; to include them in national forest programmes; to establish and, where appropriate, clarify links between criteria and indicators employed at the national level and at the subnational or at the forest management unit/operational levels; and to promote their compatibility at all levels;

(c) Encouraged countries not yet participating in any of the ongoing international and regional initiatives on criteria and indicators to become involved as soon as possible, thereby gaining benefit from the experience of the existing processes as well as contributing new insights; and urged donor countries and multilateral and international organizations to provide adequate technical and financial assistance to developing countries and economies in transition to enable them to be involved and participate in the further development, field testing and implementation of criteria and indicators at the national, subnational and forest management unit/operational levels;

(d) Urged countries and international organizations, in particular FAO, UNEP and other participants in international and regional initiatives, to undertake efforts to achieve a common international understanding on concepts, essential terms and definitions used in formulating and developing criteria and indicators for sustainable forest management (and to promote their adoption); on indicators for forests in similar ecological zones; on mutual recognition among

sets of criteria and indicators as tools for assessing trends in forest management and conditions at the national level; and on transparent methods for the measurement of indicators and the collection, assembly, storage and dissemination of data;

(e) Recommended that FAO and participants in regional and international initiatives draw on commonalities between criteria and indicators developed in such initiatives, as well as on the Forest Principles, and recommended that criteria and indicators be used by FAO and other relevant organizations in order to improve consistency in reporting on forest assessment and sustainable forest management;

(f) Requested that the Conference of the Parties to the Convention on Biological Diversity take note of the work of the various existing initiatives on criteria and indicators to ensure that the work done by the Convention on Biological Diversity on developing and implementing biodiversity indicators would be consistent with and complementary to them.

IV. TRADE AND ENVIRONMENT IN RELATION TO FOREST PRODUCTS AND SERVICES

Conclusions

116. The Panel acknowledged the potential positive relationship between trade in forest products and services and sustainable forest management. It recognized the importance of promoting sustainable forest management through mutually supportive trade and environmental policies, in particular avoiding policies that have adverse impacts on the management, conservation and sustainable development of forests. However, it also recognized the wide range and complexity of the issues associated with this topic. A continuing process of consensus-building is needed, including the exploration of the possible need for specific international trade agreements in forest products and voluntary codes of conduct for sustainable forest management to facilitate and improve trade in forest products in specific areas.

117. The Panel emphasized that the issues of trade and environment relating to forest products and services should be addressed in a holistic manner, taking into account chapter 11 of Agenda 21 and the Forest Principles. It recognized, however, that there was inadequate information on both domestic and international trade in non-wood products and forest services. Further studies and data gathering are needed to overcome those gaps in future.

118. The Uruguay Round of multilateral trade negotiations made significant progress in improving market access for forest products, especially in terms of reducing tariffs for all types of forest products. Yet barriers to international trade in forest products, particularly non-tariff barriers, could still impede access of forest products to the international market.

119. Forest products obtained from sustainably managed forests may be considered to be environmentally friendly. Competition between different products from different regions and between wood and non-wood alternatives is inevitable. It

need not constrain national or global efforts to achieve sustainable forest management, but could have implications for sustainable forest management and for markets for specific forest products in the future. Further economic and market studies, therefore, should be carried out to determine how best to use markets and economic instruments to promote sustainable forest management.

120. For the majority of developing countries, exports of processed products represent a small proportion of their total roundwood production. Additional efforts, therefore, should be geared towards promoting efficient and environmentally sound downstream processing industries and exports of processed products, consistent with sustainable forest management, in order to increase their contribution to sustainable development and to increase export earnings.

121. The Panel noted that producer countries and international institutions have undertaken many efforts and initiatives to promote lesser used species in the international tropical timber market. Progress is still limited, but efforts should continue and should also include temperate and boreal species, consistent with the management, conservation and sustainable development of all types of forests.

122. International attention to the issues of the certification of forest management and labelling of forest products should be put into perspective. To date, only a small proportion of the global trade in forest products and a small area of the world's forests are influenced by those schemes. Because of inadequate information and relatively few real world experiences, it is still too early to assess objectively their full potential in promoting sustainable forest management. More studies and information are required to clarify various uncertainties, including the impacts of certification on forest enterprises and markets; the competitiveness of forest products; the economic and non-economic costs and benefits; the demand for certified products; the feasibility and credibility of certification at different levels; the use of criteria and indicators; the governance and credibility of certification schemes in the context of consistency with international agreements; and the role of Government as a regulator, and in some countries also as resource owner.

123. The Panel recognized that voluntary certification and labelling schemes are among many potentially useful tools that can be employed to promote the sustainable management of forests. In view of the potential proliferation of schemes, there is a need to promote comparability and avoid duplication among various voluntary certification and labelling schemes.

124. The Panel accepted that Governments have a critical role in promoting effective sustainable forest management systems. However, because certification has thus far been developed as a voluntary private initiative, different views expressed on the roles of Governments and intergovernmental institutions in the development or regulation of certification systems require further clarification. In considering possible roles for Governments, bearing in mind the fact that certification is a market-driven process, distinctions should be made between the roles of Governments as regulators, as promoters of public policy, and in some countries as forest owners. Governments, however, have a role in encouraging transparency, the full participation of interested parties, non-discrimination, and open access to voluntary certification schemes.

125. International efforts should focus on ensuring that existing and new certification and labelling schemes are open and non-discriminatory in respect of types of forests or forest products, forest owners, managers and operators, are not used as a form of disguised protectionism and are not in conflict with international obligations.

126. Full-cost internalization may contribute to sustainable forest management in the long term. Without it, socio-economic and environmental costs may not be fully reflected in and addressed by the market, with the result that unsustainable practices may appear more attractive and less costly than sustainable forest management. Only limited consensus exists on concepts, definitions, measurements, techniques and data requirements to introduce environmental costs into pricing mechanisms. The relationship to substitutes, among other things, will affect the allocation of costs and benefits of cost internalization and market-based instruments. Exchange of information on various research findings and experiences in relation to costs and policy mechanisms are encouraged so as to facilitate discussion and policy development.

127. Greater market transparency has the potential to promote the mutually supportive roles of trade and environment in the forest sector. Improved market transparency would also help to address such issues as illegal international trade in forest products, transfer pricing and market distortions. Despite some ongoing efforts by relevant international organizations, there has been little progress in improving market transparency for trade in forest products, and the Panel agreed that further efforts should be encouraged.

Proposals for action on market access

128. The Panel:

(a) Urged countries and relevant international organizations to study the environmental, social and economic impacts of trade-related measures affecting forest products and services;

(b) Requested countries to undertake measures for improving market access for forest goods and services, including the reduction of tariff and non-tariff barriers to trade in accordance with existing international obligations and commitments, and in that context to promote a mutually supportive relationship between environment and trade in forest goods and services, and to avoid conflict between measures that affect trade in forest goods and services and existing international obligations so that environmental concerns do not lead to disguised barriers to trade;

(c) Urged all countries, subject to their national legislation, to encourage efforts by the private sector, in consultation with interested parties, to formulate and implement voluntary codes of conduct for promoting sustainable forest management for forest owners, forest developers and international investors in forestry so as to improve trade in forest products, and to endeavour to ensure that external trade policies take into account community rights, where appropriate.

129. The Panel discussed the following options for action relating to possible agreement for forest products from all types of forests, based on non-discriminatory rules and multilaterally agreed procedures, without reaching a consensus on these or other possible procedures:

(a) To take note of the International Tropical Timber Agreement (ITTA) of 1994, in particular the commitment made by ITTO members to review the scope of the agreement four years after its entry into force on 1 January 1997;

(b) To explore the possibility of extending the concept of the Year 2000 Objective of ITTA for all types of forests;

(c) To explore the possibility of an international agreement on trade in forest products from all types of forests;

(d) To examine the possibilities of further initiatives on trade liberalization within the auspices of the World Trade Organization;

(e) To explore, within an intergovernmental forum on forests, intergovernmental negotiating committee or other arrangements decided upon at an appropriate time, the possibilities of promoting the management, conservation and sustainable development of all types of forests and trade in forest products in the context of an international, comprehensive and legally binding instrument on all types of forests.

130. The Panel considered the question of the relationship between obligations under international agreement and national measures, including actions imposed by subnational jurisdictions, but was not able to reach a consensus. Options for action proposed included:

(a) Urging countries to remove all unilateral measures to the extent that those are inconsistent with international agreements;

(b) Urging countries to remove all unilateral bans and boycotts inconsistent with the rules of the international trade system, including those imposed by subnational jurisdictions, in order to facilitate the long-term management, conservation and sustainable development of all types of forests, in accordance with paragraph 14 of the Forest Principles;

(c) Recognizing that those matters are also considered in forums whose primary competence is to address trade issues.

Proposals for action on the relative competitiveness of forest products

131. The Panel:

(a) Called upon relevant organizations to support efforts to gather more information and conduct more independent market and economic studies of potential competition between wood and non-wood substitutes, analysing the costs and benefits, including any substitution effects, and the overall impact on the management, conservation and sustainable development of all types of forests;

(b) Urged developed countries and relevant international organizations to support efforts by developing countries, consistent with policies and programmes for sustainable forest management, to increase their productivity and efficiency in downstream processing activities, and to support, where appropriate, community-based processing and marketing of wood and non-timber forest products.

Proposals for action on lesser used species

132. The Panel:

(a) Called upon countries and relevant international organizations and research institutions to intensify efforts to promote lesser used forest species in domestic and international markets, where increased use is consistent with sustainable forest management;

(b) Urged producer countries to implement policies that are compatible and consistent with sustainable forest management for the utilization of economically viable lesser used species;

(c) Urged international organizations and research institutions to transfer technology, and to support national and community level efforts to develop and adapt technologies including traditional forest-related knowledge, for increasing the sustainable utilization of lesser used species.

Proposals for action on certification and labelling

133. The Panel:

(a) Urged countries, within their respective legal frameworks, and international organizations to consider the potentially mutually supportive relationship between sustainable forest management, trade, and voluntary certification and labelling schemes operating in accordance with relevant national legislations, and to endeavour to ensure, as necessary, that such schemes are not used as a form of disguised protectionism, and to help to ensure, as necessary, that they do not conflict with international obligations;

(b) Invited developed countries and international organizations to support, including through technical and financial assistance, efforts in developing countries to enhance the assessment capabilities of developing countries in relation to voluntary certification and labelling;

(c) Urged countries to support the application to certification schemes of such concepts as:

(i) Open access and non-discrimination in respect of all types of forests, forest owners, managers and operators;

(ii) Credibility;

(iii) Non-deceptiveness;

(iv) Cost-effectiveness;

(v) Participation that seeks to involve all interested parties, including local communities;

(vi) Sustainable forest management;

(vii) Transparency;

(d) Invited relevant organizations, in accordance with their mandate, to carry out further studies on various aspects of voluntary certification and labelling schemes, including:

(i) Effectiveness in promoting sustainable forest management;

(ii) The relationships between various criteria and indicator frameworks and certification;

(iii) Issues relevant to the development, implementation, promotion, equivalency and mutual recognition of voluntary certification and labelling schemes, and the role of government in that context;

(iv) The special needs of local communities, other forest-dependent populations and owners of small forests;

(v) The need to monitor practical experience with certification, including accreditation processes;

(vi) The development of consistent terminology;

(vii) The impacts of such schemes on the relative competitiveness of forest goods and services in the absence of equivalent schemes for substitutes;

(viii) The needs of countries with low forest cover;

(e) Invited countries to consider the relevance to certification schemes of the Centre for International Forestry Research project on criteria and indicators for sustainable forest management;

(f) Urged countries and relevant international organizations dealing with trade in forest products to bring the current trends on certification into perspective, and to promote comparability and avoid duplication of efforts among various voluntary certification and labelling schemes;

(g) Called upon countries and relevant agencies to make arrangements for and support an exchange of information and experience on certification and labelling schemes, in appropriate forums, to ensure transparency on an ongoing basis.

Proposals for action on full-cost internalization

134. The Panel:

(a) Called upon countries and relevant international organizations concerned with forestry and trade to explore ways and means to establish full cost internalization of both wood products and non-wood substitutes, and to undertake market and economic analyses of their implications for forest management and development costs and for sustainable forest management. Such analyses should also examine the potential cost and benefits of improved efficiency and sustainability at all levels of the forest industry;

(b) Drawing upon the work being carried out by countries and relevant international organizations, encouraged the sharing of information on research findings and experiences concerning the implementation of full cost internalization and its application to sustainable forest management, and relevant policy mechanisms.

Proposals for action on market transparency

135. The Panel:

(a) Called upon relevant international organizations and national institutions to expand their work on market transparency for trade in forest products and services, and to include the possible development of a global database;

(b) Invited countries to provide an assessment and share relevant information on the nature and extent of illegal trade in forest products, and to consider measures to counter such illegal trade.

V. INTERNATIONAL ORGANIZATIONS AND MULTILATERAL INSTITUTIONS AND INSTRUMENTS, INCLUDING APPROPRIATE LEGAL MECHANISMS

Conclusions

136. The Panel recognized the need to strengthen coordination among international organizations and multilateral institutions in order to provide a holistic and balanced approach to all types of forests. The Panel also recognized that a number of international instruments and institutions deal with specific aspects of or matters closely related to forests, as well as with matters in other sectors that may directly affect forests. At the same time, the Panel acknowledged that, at present, no single multilateral body, organization or instrument has either a mandate or capacity to address, in a balanced, holistic and mutually reinforcing way, all issues that are currently on the international agenda with respect to all types of forests.

137. The Panel noted that it has provided a very useful forum for examining a wide range of international forest issues in a holistic, integrated and cohesive manner, and for building consensus in a number of areas. The work of the informal high-level Inter-Agency Task Force on Forests, which was established to support the Panel, was commended as an example of effective inter-institutional collaboration. That informal arrangement has proven to be flexible and effective, has provided an opportunity for outreach beyond the United Nations system, and could easily involve other institutions in the future.

138. The Panel noted the need for enhanced international efforts in a number of interlinked forest-related areas, including effective governance of international institutions, organizations and instruments dealing with forest issues; improved mechanisms for focusing, coordinating and monitoring the activities undertaken by agencies and to implement instruments on international forest-related issues; improved participation of major groups in forest-related forums and processes to promote sustainable forest management; strategic data collection and analysis; projects to strengthen capacity-building, technology transfer and exchange, and human resource development, in particular at the national and field levels; improved coordination between international and bilateral funding agencies; and more focused and effective funding for and coordination of research and development in priority areas concerned with sustainable forest management.

139. The Panel agreed that forest-related international, regional and bilateral agencies and organizations, existing legal instruments, financial and trade institutions and treaty bodies should mobilize their respective strengths and capacities in implementing the proposals for action in the Panel's report, and should further promote policy dialogue, consensus-building and international cooperation, recalling Agenda 21 and paragraph 10 of the Forest Principles. More still needs to be done to clarify mandates, define capacities and address overlaps, gaps and areas that need enhancement. Forest-related activities should be made more transparent, effective and flexible, and should provide for effective participation of and collaboration among all interested parties and major groups. The benefits of regional approaches should be fully explored.

140. The Panel noted that there are existing international legally binding instruments that are relevant to forests, such as the Convention on Biological Diversity, the Convention to Combat Desertification, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the International Tropical Timber Agreement, the United Nations Framework Convention on Climate Change, and the Convention on Wetlands of International Importance, Especially as Waterfowl Habitat. Those instruments address forest-related issues in a specific context, embody the concept of sustainability, and address many cross-cutting issues that are relevant to forests, such as financial resources, technology transfer, trade, and traditional knowledge. They do not deal comprehensively with all issues relating to forests, including sustainable forest management. Some delegations considered that trade in products from all types of forests also need further consideration in a legal instrument.

141. The Panel recognized the importance of addressing forests in a holistic way at the regional and national level, and noted the several regional and international initiatives and regional mechanisms that have been launched by like-minded countries outside the United Nations system framework to promote the national implementation of improved forest management. Particularly notable are several initiatives related to developing and implementing criteria and indicators for sustainable forest management, in which more than 130 countries now participate.

142. The Panel noted that there is no global instrument that deals in a comprehensive and holistic way with all types of forests. The Panel agreed that in order to achieve the management, conservation and sustainable development of

all types of forests it is necessary to deal coherently with all the interrelated social, cultural, economic, trade, environment, development, production, financial and technology issues that have a concrete impact on those objectives. The Panel recognized the need to address, in an integrated manner, such issues as trade, market access and transparency, economic, environmental and social policies that directly or indirectly affect the forest sector, private investment, financial resources and the transfer of technology.

143. The Panel recommended that the holistic and balanced approach to intergovernmental forest policy dialogue and consensus-building, as launched by the Commission through the establishment of the Panel, should be continued and enhanced. That continued intergovernmental policy dialogue on forests, which could include a high-level component, should promote and facilitate, in a transparent and participatory manner, a holistic consideration of all relevant forest-related issues, and should ensure balanced treatment of all types of forests based on the principles of common but differentiated responsibilities of all countries and the sovereign right of States over their natural resources, as contained in principles 2 and 7 of the Rio Declaration on Environment and Development and paragraphs 1 (a) and 2 (a) of the Forest Principles.

Proposals for action

144. The Panel urged international organizations, in cooperation with countries, to support and implement its proposals for action.

145. The Panel called upon the appropriate international institutions and organizations to continue their work in the informal high-level Inter-Agency Task Force on Forests, under the chairmanship of FAO as task manager for chapter 11 of Agenda 21, focusing on the proposals for action recommended by the Panel, in accordance with their respective mandates and comparative advantage, and proposed that the Task Force, in a transparent and participatory manner, undertake further coordination and explore means for collaboration and coherent action at the international, regional and country levels, in support of any continuing intergovernmental dialogue on forests.

146. The Panel called on countries:

(a) To support the work on forest-related issues undertaken by international and regional organizations and agencies and under relevant instruments;

(b) To clarify the mandates of the relevant international institutions and organizations related to forest issues, inter alia, through their respective governing bodies, in order to improve integration and coordination of their efforts and to guide the activities of each organization to areas in which they can be most effective;

(c) Through the respective governing bodies, to work to eliminate waste and duplication, thereby using available resources in an efficient manner;

(d) To guide relevant international and regional institutions and those administering instruments, through their governing bodies, to accelerate

incorporation into their relevant work programmes of the forest-related results of UNCED and of further progress achieved since then, and of the proposals for action recommended by the Panel;

(e) To support activities related to the management, conservation and sustainable development of all types of forests.

147. The Panel examined a number of options for action at the intergovernmental level to continue the intergovernmental policy dialogue on all types of forests and to monitor progress in and promote the implementation of the Panel's proposals for action. It proposed the following options, which were not necessarily seen to be mutually exclusive:

(a) To continue the intergovernmental policy dialogue on forests and the consideration of all aspects and programmes aimed at the management, conservation and sustainable development of all types of forests in a holistic manner within existing forums, such as the Commission, FAO and their respective institutional structures, as well as other appropriate international organizations, institutions and instruments;

(b) To continue the intergovernmental policy dialogue on forests through the establishment of an ad hoc open-ended intergovernmental forum on forests under the auspices of the Commission, with a focused and time-limited mandate, charged with, inter alia, reviewing, monitoring and reporting on progress in the management, conservation and sustainable development of all types of forests, promoting and monitoring the implementation of the Panel's proposals for action, and either:

(i) On that basis, considering and advising on the need for other arrangements and mechanisms, including legal arrangements covering all types of forests, and reporting on those matters to the Commission at the appropriate time in its work programme, which has yet to be defined;

and/or:

(ii) Preparing the basis and building the necessary consensus for a decision to negotiate and elaborate possible elements of a legally binding instrument, reporting to the Commission in 1999 on its work;

(c) To carry forward intergovernmental policy action on forests through the establishment, as soon as possible, under the authority of the General Assembly, of an intergovernmental negotiating committee on a legally binding instrument on all types of forest, with a focused and time-limited mandate.

148. The Panel also examined numerous detailed suggestions on the mandate and programme of work under the above options; these were noted by the Secretariat for future reference and consideration, and will be included in a forthcoming compilation.

149. The Panel recommended that the options contained in paragraph 147 (b) and (c) above, if endorsed, should be serviced by a small secretariat within the

secretariat of the Commission in the Department for Policy Coordination and Sustainable Development of the United Nations Secretariat, and should be supported by the Task Force.

VI. ADOPTION OF THE REPORT OF THE PANEL ON ITS FOURTH SESSION

150. At its 7th meeting, on 21 February 1997, the Panel had before it the draft report on its fourth session (E/CN.17/IPF/1997/L.1), as well as a number of informal papers.

151. At the same meeting, the Working Group took note of the informal papers and adopted its report.

VII. ORGANIZATIONAL AND OTHER MATTERS

A. Opening and duration of the session

152. The Ad Hoc Intergovernmental Panel on Forests of the Commission on Sustainable Development held its fourth session from 11 to 21 February 1997, in accordance with Economic and Social Council decision 1996/230. The Panel held seven meetings (1st to 7th meetings).

153. The session was opened by one of the Co-Chairmen, Sir Martin Holdgate (United Kingdom of Great Britain and Northern Ireland). The other Co-Chairman, Mr. Manuel Rodríguez (Colombia), also made an opening statement.

154. The Under-Secretary-General for Policy Coordination and Sustainable Development of the United Nations Secretariat made an introductory statement.

B. Election of officers

155. At the 1st meeting, on 11 February 1997, the Panel elected Mr. S. K. Pande (India) Vice-Chairman of the Panel for the fourth session, to replace Mr. M. F. Ahmed (India), who had retired.

156. The Bureau of the Panel comprised the following officers:

Co-Chairmen: Sir Martin Holdgate (United Kingdom of Great Britain and Northern Ireland)
Mr. Manuel Rodríguez (Colombia)

Vice-Chairmen: Mr. Juste Boussienguet (Gabon)
Mr. S. K. Pande (India)
Mr. Anatoliy I. Pisarenko (Russian Federation)

157. As decided at the second session of the Panel, Mr. Juste Boussienguet also served as Rapporteur at the fourth session.

C. Agenda and organization of work

158. At the 1st meeting, on 11 February 1997, the Panel adopted its provisional agenda, as contained in document E/CN.17/IPF/1997/1, and approved its organization of work. The agenda was as follows:

1. Adoption of the agenda and other organizational matters.

2. Implementation of forest-related decisions of the United Nations Conference on Environment and Development at the national and international levels, including an examination of sectoral and cross-sectoral linkages.

3. International cooperation in financial assistance and technology transfer.

4. Scientific research, forest assessment and development of criteria and indicators for sustainable forest management.

5. Trade and environment in relation to forest products and services.

6. International organizations and multilateral institutions and instruments, including appropriate legal mechanisms.

7. Other matters.

8. Adoption of the report of the Panel on its fourth session.

159. Also at the 1st meeting, the Panel agreed to establish two in-session working groups, each to be chaired by one of the Co-Chairmen.

D. Attendance

160. The session was attended by representatives of 52 States members of the Commission on Sustainable Development. Observers for other States Members of the United Nations and for the European Community, representatives of organizations of the United Nations system, and secretariats of treaty bodies, as well as observers for intergovernmental, non-governmental and other organizations also attended. The list of participants is contained in annex I.

E. Documentation

161. The Panel had before it the following documents:

(a) Report of the Ad Hoc Intergovernmental Panel on Forests on its third session (Geneva, 9-20 September 1996) (E/CN.17/IPF/1997/2);

(b) Note by the Secretariat transmitting a note by the Co-Chairmen of the Ad Hoc Intergovernmental Panel on Forests on elements of a draft report of the Panel on its fourth session (E/CN.17/IPF/1997/3);

(c) Report of the Secretary-General entitled "Programme element V.1: International organizations and multilateral institutions and instruments" (E/CN.17/IPF/1997/4);

(d) Report of the Secretary-General entitled "Options for follow-up to the work of the Intergovernmental Panel on Forests in relation to programme element V.2: Contribution to consensus-building towards the further implementation of the Forest Principles" (E/CN.17/IPF/1997/5);

(e) Letter dated 15 January 1997 from the Permanent Representatives of Colombia and Denmark to the United Nations addressed to the Secretary-General, transmitting the results of the International Meeting of Indigenous and Other Forest-Dependent Peoples on the Management, Conservation and Sustainable Development of All Types of Forests (Leticia, Colombia, 9-13 December 1996) (E/CN.17/IPF/1997/6);

(f) Letter dated 27 January 1997 from the Permanent Representatives of Sweden and Uganda to the United Nations addressed to the Secretary-General, transmitting the report of the Inter-Governmental Workshop of Experts on Sustainable Forestry and Land Use (Stockholm, 14-18 October 1996) (E/CN.17/IPF/1997/7);

(g) Note by the Secretary-General transmitting the text of decision III/12 of the Conference of the Parties to the Convention on Biological Diversity (E/CN.17/IPF/1997/8);

(h) Note verbale dated 5 February 1997 from the Permanent Representative of Japan to the United Nations addressed to the Secretary-General, transmitting the final report of the International Workshop on Integrated Application of Sustainable Forest Management Practices (Kochi, Japan, 22-25 November 1996) (E/CN.17/IPF/1997/9).

Notes

[1] Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol. I, Resolutions Adopted by the Conference (United Nations publication, Sales No. E.93.I.8 and Corrigendum), resolution 1, annex III.

[2] Ibid., annex I.

[3] Ibid., annex II.

Annex I

LIST OF PARTICIPANTS

Members

Antigua and Barbuda	
Australia	Tony Press, Peter Thomas, Gary Dolman, Rod Holesgrove, Frank McKinnell, Mark Gray
Bahamas	
Bangladesh	Anwarul Karim Chowdhury, M. Zillur Rahman, Muhammad Ali Sorcar
Belgium	Alex Reyn, Christian Lepage, Hugo Brauwers
Benin	Fassassi A. Yacoubou, Alioune S. Aladji Boni, Rogatien Biaou, Houssou Paul Houansou
Bolivia	Maria Estela Mendoza
Brazil	Sergio Florencio, Enio Cordeiro, Antonio Fernando Cruz de Mello, Antonio Carlos do Prado, Luiz Carlos Ros Filho
Bulgaria	Raiko Raichev, Zvetolyub Basmajiev
Burundi	
Canada	Yvan Hardy, Jacques Carette, David Drake, Richard Ballhorn, Ralph Roberts, Rosalie McConnell, Denis Chouinard, Denyse Rousseau, Victoria Berry, Jacques Robitaille, Guy Lemieux, Peggy Smith, Martin von Mirbach, Jean-Pierre Martel
Central African Republic	
China	Qu Guilin, Su Wei, Zhou Goulin, Wang Qun
Colombia	Julio Londono Paredes, Manuel Rodriguez Becerra, Maria Andrea Alban, Alvaro Jose Rodriguez
Djibouti	
Egypt	
Ethiopia	

Finland	Birgitta Stenius-Mladenov, Pekka Patosaari, Taisto Hulmasalo, Manu Virtamo, Elias Lähdesmäki, Markku Aho, Salla Korpela, Leena Karjalainen-Balk, Anneli Sund, Erja Fagerlund, Heikki Granholm, Hannu Valtanen, Timo Nyrhinen, Esko Joutsamo
France	Andre Grammont, Janie Letrot, Bernard Chevalier, Philippe Delacroix, Jean-Paul Lanly, Jean-Pierre Le Danff, Genevieve Rey
Gabon	Parfait Onanga-Anyanga, Juste Boussienguet, Athanase Boussengue, Andre Jules Madingou, Guy-Marcel Eboumy
Germany	Wolfgang Runge, Ulrich Hoenisch, Rainald Roesch, Hagen Frost, Peter Franz, Udo Vollmer, Peter Fahrenholtz, Christian Mersmann, Gerhard Dieterle
Ghana	Jack B. Wilmot, Edward Dwumfour, Messie Y. Amoah
Guyana	Samuel R. Insanally, Clayton Hall, George Talbot, Koreen Simon
Hungary	
India	
Indonesia	Nugroho Wisnumurti, Toga Silitonga, I. G. M. Tantra, Untung Iskandar, Benny H. Sormin, M. Slamet Hidayat, Wening Esthyprobo Moe'min, Bagas Hapsoro, Rudy Tarumingkeng
Iran (Islamic Republic of)	Mostafa Jabari, Esmail Tekieh Sadat
Ireland	
Japan	Takao Shibata, Toshikatsu Aoyama, Hiroaki Shinohara, Yutaka Tsunetomi, Takeshi Goto, Atsuo Ida, Shin Inoue
Mexico	Diana L. Ponce-Nava, Ulises Canchola
Mozambique	
Netherlands	Hans Hoogeveen, Ton van der Zon, Peter Schütz, Rob Velders, Jeroen Steeghs, Karin Wester
Pakistan	

Panama	Jorge E. Illueca, Ruth Decerega, Hernan Tejeira, Judith Cardoze
Papua New Guinea	Utula U. Samana, Dike Kari, Jimmy U. Ovia, Adam Vai Delaney
Peru	Fernando Guillen, Amalia Torres, Italo Acha
Philippines	Felipe Mabilangan, Jose De Malvas, Cecilia B. Rebong, Glenn F. Corbin
Poland	Tadeusz Strojwas, Kazimierz Rykowski, Lucyna Lundorff
Russian Federation	Anatoliy I. Pisarenko, Eugeny P. Kuzmichev, N. V. Chulkov, A. P. Kornienko, Valentin V. Strahov, I. P. Bulafni, V. M. Zimianin, V. A. Nebenzia, A. A. Pankin, A. V. Davidenko
Saudi Arabia	
Senegal	Abdoulaye Kane
Slovakia	Juraj Balkovic, Alexander Carny, Milan Dubcek
Spain	Arturo Laclaustra, Francisco Rabena, D. Ramiro Puig, Marta Betanzos
Sudan	Hassan Osman Abdelnur
Sweden	Hans Lundborg, Astrid Bergquist, Susanne Jacobsson, Ulf Svensson, Linda Hedlund, Gunnar Nordanstig, Reidar Persson, Stefan Wirten, Jan Sandstrom
Switzerland	Pierre Muehlemann, Manuela Jost Ernst, Werner Hunziker, Monika Linn Locher, Livia Leu
Thailand	Apiwat Sretarugsa, Arunrung Phothong
Ukraine	Tetyana V. Gardashchuk, Volodymyr M. Reshetnyak
United Kingdom of Great Britain and Northern Ireland	Sir John Weston, Sir Martin Holdgate, Peter Gooderham, Victoria Harris, Jill Barrett, Penny Brooke, Anthony Smith, John Hudson, Michael Dudley, David Bills

United States of America	Mark Hambley, Stephanie Caswell, Robert McSwain, Kathryn Shippe, Jan McAlpine, Mary Coulombe, Douglas Kneeland, Michael Hicks, Franklin Moore, Adela Backiel, Joseph Ferrante, Wendy McConnel, Julia Jack, Marvin Brown, Gary Cook
Venezuela	Luis Castro Morales, Isabel Bacalao-Roner, Samuel Mendoza, Judith Musso Q, Sulenma Ramirez, Luis Fernando Perez-Segnini, Lisette Hernandez
Zimbabwe	

States Members of the United Nations represented by observers

Algeria, Argentina, Armenia, Cameroon, Chile, Costa Rica, Côte d'Ivoire, Cuba, Cyprus, Czech Republic, Denmark, Ecuador, Greece, Guatemala, Israel, Italy, Latvia, Lebanon, Madagascar, Malaysia, Morocco, New Zealand, Nicaragua, Norway, Portugal, Republic of Korea, Romania, Saint Lucia, Samoa, Slovakia, South Africa, Togo, Turkey, Uganda, Uruguay, Yemen

Entities represented by observers

European Community

United Nations

United Nations Environment Programme

Specialized agencies

Food and Agriculture Organization of the United Nations, United Nations Educational, Scientific and Cultural Organization, World Bank, International Monetary Fund, World Trade Organization

Secretariats of treaty bodies

Convention on Biological Diversity

Intergovernmental organizations

International Tropical Timber Organization, Organisation for Economic Cooperation and Development

Non-governmental organizations

General consultative status with the Economic and Social Council	Franciscans International, World Wide Fund for Nature International
Special consultative status with the Council	Forest Alliance of British Columbia, Greenpeace International, International Indian Treaty Council, International Union for Conservation of Nature and Natural Resources
On the Roster of the Council or accredited to the Commission on Sustainable Development	Canadian Pulp and Paper Association, Center for International Environmental Law (CIEL), Centre for Science and Environment, Cousteau Society, Cultural Survival Canada (Amazon Coalition), Deutsche Naturschutzring (DNR), Environment Investigation Agency, Friends of the Earth (FOE), Fundación Natura, Fundación Peruana para la Conservación de la Naturaleza, International Hardwood Products Association, International Institute for Sustainable Development, Scottish Environmental Forum, SERVAS International, Sierra Club, Survival International Ltd., Third World Network, United Nations Association of the USA, UNED-UK/United Nations Environment and Development - United Kingdom Committee, World Conservation Monitoring Centre

Annex II

LIST OF GOVERNMENT-SPONSORED INITIATIVES IN SUPPORT OF THE INTERGOVERNMENTAL PANEL ON FORESTS

International conference on certification and labelling of products from sustainable managed forests, sponsored by Australia (Brisbane, Australia, 26-31 May 1996)

International workshop on financial mechanisms and sources of finance for sustainable forestry, co-sponsored by Denmark, South Africa and UNDP (South Africa, 3-7 June 1996)

Expert consultation on implementing the Forest Principles: promotion of national forest and land-use programmes, sponsored by Germany (Feldafing, Germany, 17-21 June 1996)

International expert meeting on rehabilitation of degraded forest ecosystems, co-sponsored by Cape Verde, Portugal, Senegal, the European Community and FAO (Lisbon, 24-28 June 1996)

Expert meetings on forests on the theme "Overview on international organizations, institutions and instruments related to forests", co-sponsored by Switzerland and Peru (Geneva, 5-8 March and 24-28 June 1996)

Expert group meeting on trade, labelling of timber and certification of sustainable forest management, co-sponsored by Germany and Indonesia (Bonn, 12-16 August 1996)

Intergovernmental seminar on criteria and indicators for sustainable forest management, sponsored by Finland (Helsinki, 19-22 August 1996)

A study sponsored by the Government of Norway, entitled "Long-term trends and prospects in supply and demand for wood products, and possible implications for sustainable forest management", culminated in a report entitled "Long-term trends and prospects in wood supply and demand for wood, and implications for sustainable forest management: a synthesis"

Expert meeting on sustainable forestry and land use on the theme "The process of consensus-building", co-sponsored by Sweden and Uganda (Stockholm, 14-18 October 1996)

International workshop on integrated application of sustainable forest management practices, co-sponsored by Japan, Canada, Malaysia, Mexico, FAO and ITTO (Kochi, Japan, 22-25 November 1996)

International meeting of indigenous and other forest-dependent peoples on the conservation and sustainable management of forests, supported by the Governments of Colombia and Denmark (Leticia, Colombia, 9-13 December 1996); the meeting was led by the International Alliance of the Indigenous-Tribal Peoples of the Tropical Forest, in cooperation with the Indigenous Council for the Amazon Basin.